PB86-143625

Eagle Harbor Field Investigation, Winslow Washington, April-May 1984

(U.S.) Environmental Protection Agency
Seattle, WA

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NTIS

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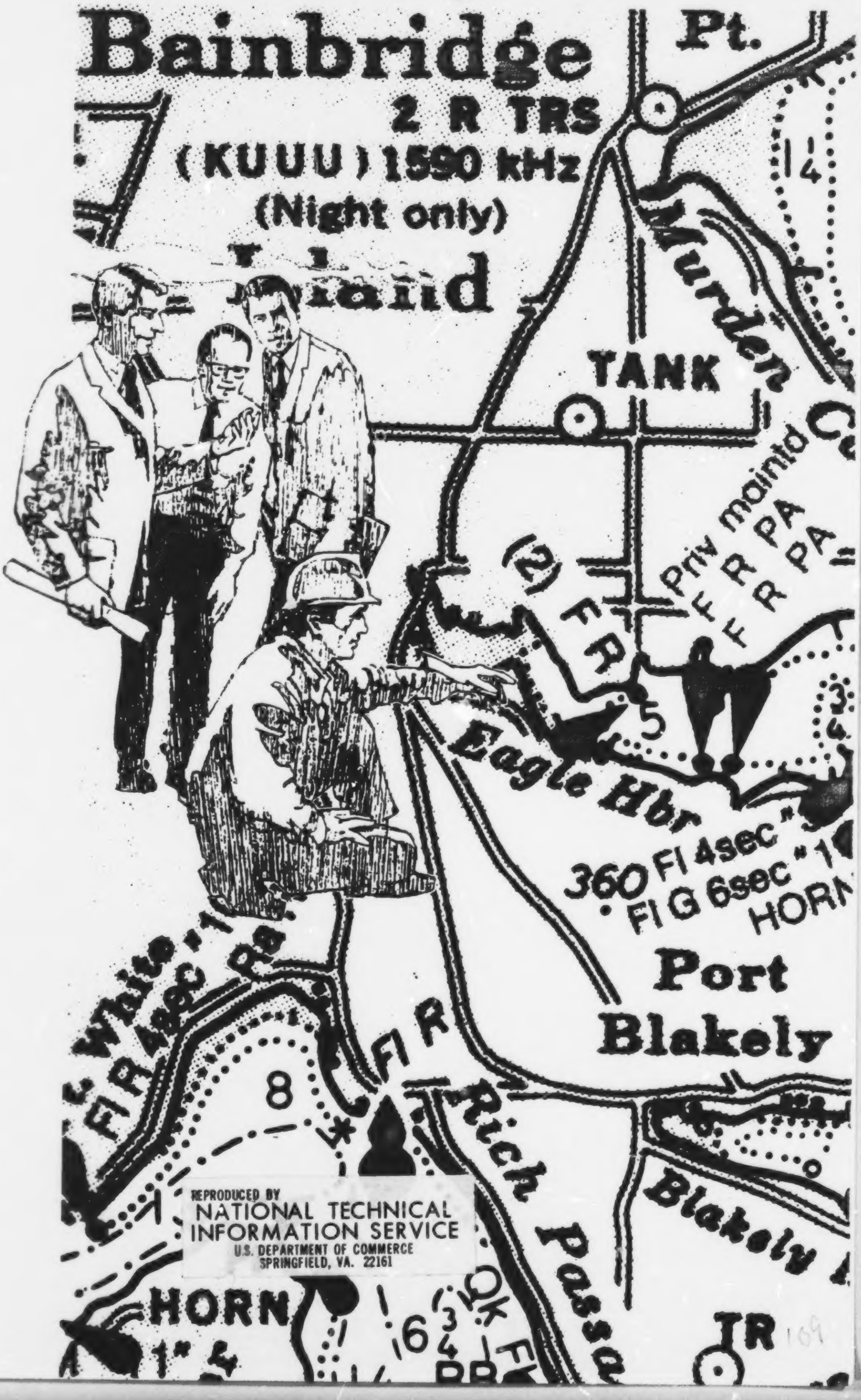
Environmental Services Division

December 1985

EPA

Eagle Harbor Field Investigation

PB86-143625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In March 1984 EPA was informed by the National Oceanic and Atmospheric Administration (NOAA) of the results of sediment and bioassay sampling that had been performed in Eagle Harbor. NOAA collected sediment samples from six locations in the harbor and performed a trawl for English sole at one of those points. The results of the NOAA study showed sediment levels of PNA as high as 300,000 ppb. Bioassays on the English sole taken showed that 85% had tumors.

In response to this information, and in a coordinated effort with the Department of Ecology, EPA conducted a study to determine the extent of subtidal and intertidal sediment contamination in Eagle Harbor. In addition to the findings discussed in this report, the Department of Ecology has analyzed clam and crab samples taken from the harbor to determine the extent of shellfish contamination. DOE and EPA have also conducted historical assessments of industrial activity in Eagle Harbor. The purpose of these assessments was to determine what sources might have contributed to the current level of pollution.

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Appendix B - August 7, 1984 Memo from Don Malins to Gary O'Neal summarizing NOAA study.
Appendix C - NOAA Puget Sound area sampling sites and summary of comparison data.
Appendices D & E - Data summary tables.

BACKGROUND

In March 1984 EPA was informed by the National Oceanic and Atmospheric Administration (NOAA) of the results of sediment and bioassay sampling that had been performed in Eagle Harbor. NOAA collected sediment samples from six locations in the harbor and performed a trawl for English sole at one of those points. The results of the NOAA study showed sediment levels of PNA as high as 300,000 ppb. Bioassays of the English sole taken showed that 85% had tumors.

In response to this information, and in a coordinated effort with the Department of Ecology, EPA conducted a study to determine the extent of subtidal and intertidal sediment contamination in Eagle harbor. In addition to the findings discussed in this report, the Department of Ecology has analyzed clam and crab samples taken from the harbor to determine the extent of shellfish contamination. DOE and EPA have also conducted historical assessments of industrial activity in Eagle Harbor. The purpose of these assessments was to determine what sources might have contributed to the current level of pollution.

STUDY DESIGN

The study area covered the entire harbor, extending as far into the sound as the southern tip of Wing Point. A total of 50 samples were taken. The location of the samples is shown in Figure 1. Samples were collected on April 17, April 18 and May 7.

One sediment sample was collected per station using a Van Veen grab sampler. The sediment (approximately the top 10 cm) not in contact with the interior of the sampler was transferred to sample containers with stainless steel spatulas.

The grab sampler was thoroughly rinsed with sea water between stations and the spatulas were rinsed with sea water and with deionized water between samples. The samples were sealed in pint glass containers with teflon lined lids, then iced and shipped to contract labs for analysis.

Samples were analyzed for priority pollutants (including 17 PNA's and pentachlorophenol), as well as several non-priority pollutants, including carbazole and dibenzofuran. The following PNA's were included as part of the analysis:

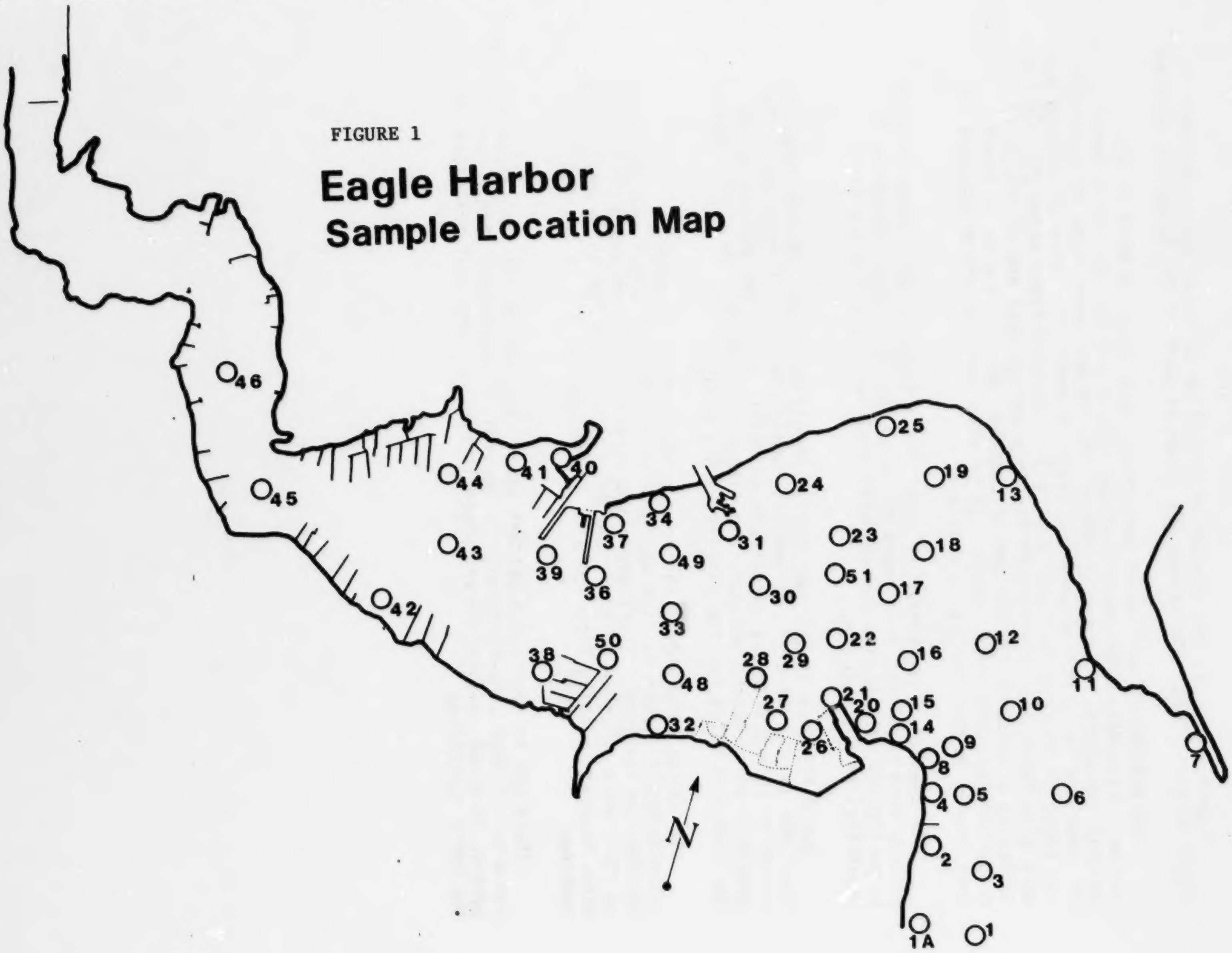
Napthalene Acenapthylene Acenapthene Fluorene
Anthracene Phenanthrene Fluoranthene Pyrene
Benz[a]anthracene Chrysene Benzo[a]pyrene
Benzo[k]fluoranthene Indeno[1,2,3-cd]pyrene
Benzo[ghi]perylene Dibenzo A,H Anthracene
Benzo(b) fluoranthene Pyrene

The samples were analyzed by several different laboratories under the contract lab program. Metals were analyzed by Rocky Mountain Laboratories. Organic analyses were performed by PEDCO, S-Cubed, Mead Compu Chem and West Coast Technical.

A sampling plan was developed for the survey and is included as Appendix A. In general the provisions of the plan were followed. One discrepancy is that grain size analyses were performed on only 10 of the samples. This was due to contractual problems with the Sample Management Office.

FIGURE 1

Eagle Harbor
Sample Location Map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32
33
34
36
37
38
39
40
41
42
43
44
45
46
48
49
50
51
N

SAMPLING RESULTS

PRIORITY POLLUTANTS

PNA's

Figure 2 depicts the spatial distribution of total PNA's observed in Eagle Harbor. Total PNA values are shown at each of the locations sampled.

Concentrations well above background were found in most of the harbor. Extremely high concentrations (above 150,000 ppb) were found at several locations. Concentrations of 180,000 ppb were found at Location 31, near the Ferry Maintenance Facility. A total PNA value of 280,000 ppb was found at location 51, near Buoy # 5. Concentrations above 250,000 ppb were also found near the Wyckoff facility at the West end of the plant, including a value of 595,000 ppb at Location 28. This area is where creosoted logs are often stored. It is also the site where creosote has been loaded to the facility via ship.

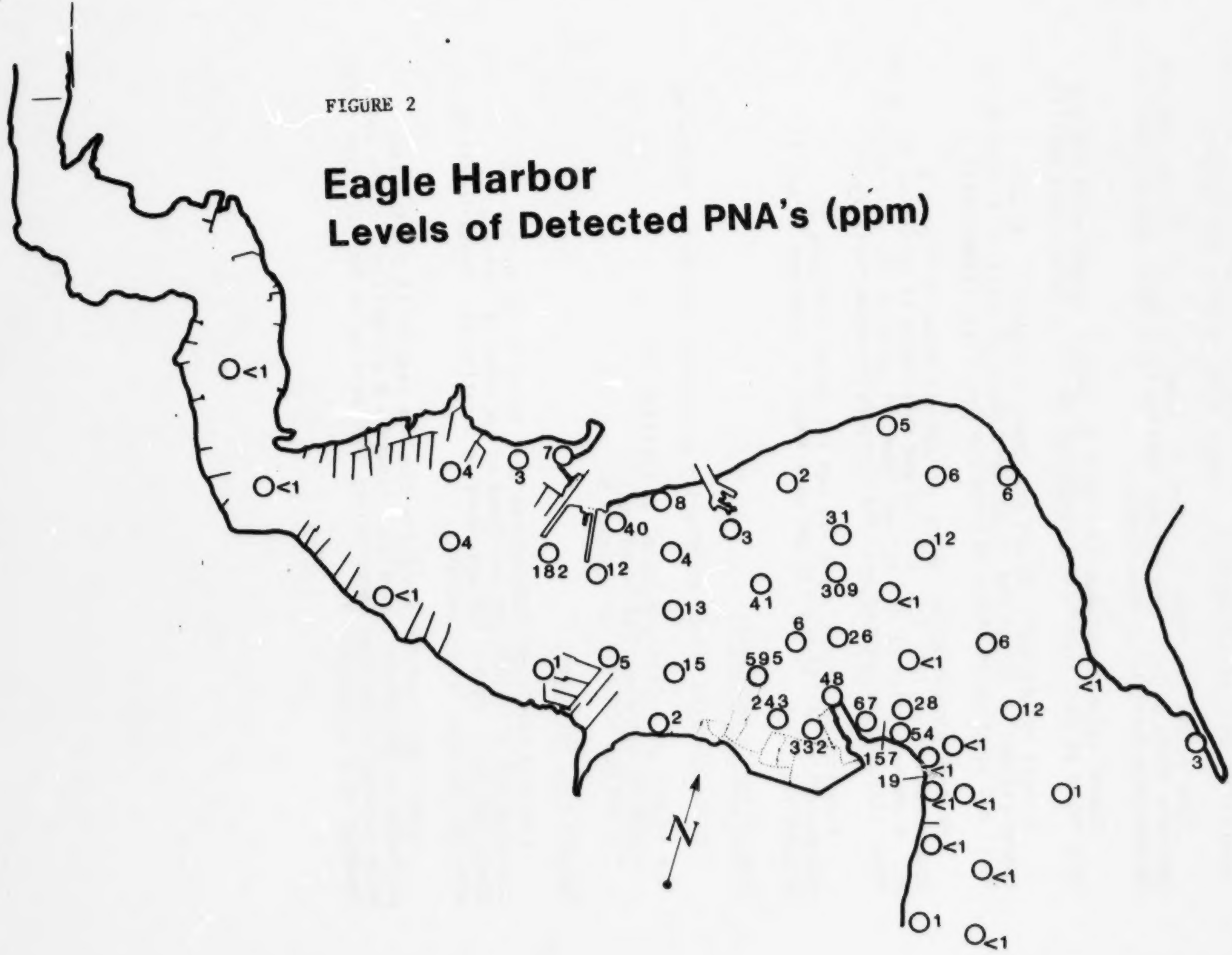
The spatial distribution of total PNA's found in this study (Figure 2) show good agreement with those found by the NOAA study (Appendix B). In particular, the highly contaminated area near Buoy # 5 has been identified in both studies.

One difference in the two studies should be noted. Malins computes Total PNA as the sum of 31 parameters, while EPA uses 17 compounds. The effect of this difference appears to be small, since the additional 15 compounds which Malins analyzes constitute a relatively small per cent of the total PNA value for the samples in his study.

PNA values vary widely throughout the harbor. However, concentrations appear to rise approaching the Wyckoff plant and the Ferry Maintenance facility. There were also several locations where little or no PNA's were detected by EPA. The detection limits for these areas were high, however, ranging from 4,000 to 23,000 ppb for all 16 parameters combined.

There was no consistent pattern among the type of PNA's observed in the areas of high concentration. In general, fluoranthene, benzo (a) pyrene, chrysene, anthracene and phenanthrene were the most prevalent of the PNA's identified. ✓

FIGURE 2



Eagle Harbor
Levels of Detected PNA's (ppm)

<1
<1
4
3
7
4
182
12
40
8
4
<1
1
5
13
15
2
3
41
595
243
6
2
31
309
26
48
332
67
157
19
28
54
<1
<1
<1
<1
<1
<1
<1
5
6
12
<1
6
6
12
<1
1
1
<1
<1
3
N

Metals

The values found for most of the metal parameters were generally consistent with background values found elsewhere in Puget Sound, (shown in Appendix C under the headings Case Inlet and Port Madison). There were some exceptions, including lead, copper, zinc, arsenic and mercury.

Lead values are shown in Figure 3. Lead values of 202 ppm and 175 ppm were found at Locations 31(near Winslow Ferry Dock) and 37 (near Ferry Maintenance facility), respectively.

Copper values are shown in Figure 4. Copper values above 100 ppm were found at four locations surrounding the Ferry maintenance facility.

Arsenic values above 10 ppm are shown in Figure 5. Arsenic concentrations of 22 ppm and 42 ppm were found at Location 31(near Ferry Dock) and Location 39 (Ferry Maintenance Facility), respectively.

Mercury concentrations above .25 ppm are shown in Figure 6. Concentrations of 1.1, 1.3, and 1.3 ppm were found at Locations 39, 40 and 41. A concentration of 4.7 ppm was found at Location 37. All four of these stations are located near the Ferry Maintenance facility.

Zinc concentrations above 100 ppm are shown in Figure 7. Concentrations of 252 and 218 ppm were found at Locations 31 and 37, respectively.

Other Priority Pollutants

Other elevated values of priority pollutants include the following.

* 15,000 ppb P-Chloro-M-Cresol at Location 14
* 608,000 ppb Phenol at Location 1
* 3,800 ppb PCB-1016 at Location 5

Non-Priority Pollutants

Elevated levels of dibenzofuran were found in the harbor. A concentration of 14,000 ppb was found at Location 14, while a concentration of 64,000 ppb was found at Location 28. These locations also had elevated levels of PNA's.

Appendices D and E present the complete results of the analyses performed on the sediment samples. Appendix D presents all of the data while Appendix E excludes those values that were below the detection limit (denoted by U in Appendix D).

FIGURE 3

Eagle Harbor
Lead (parts per million)

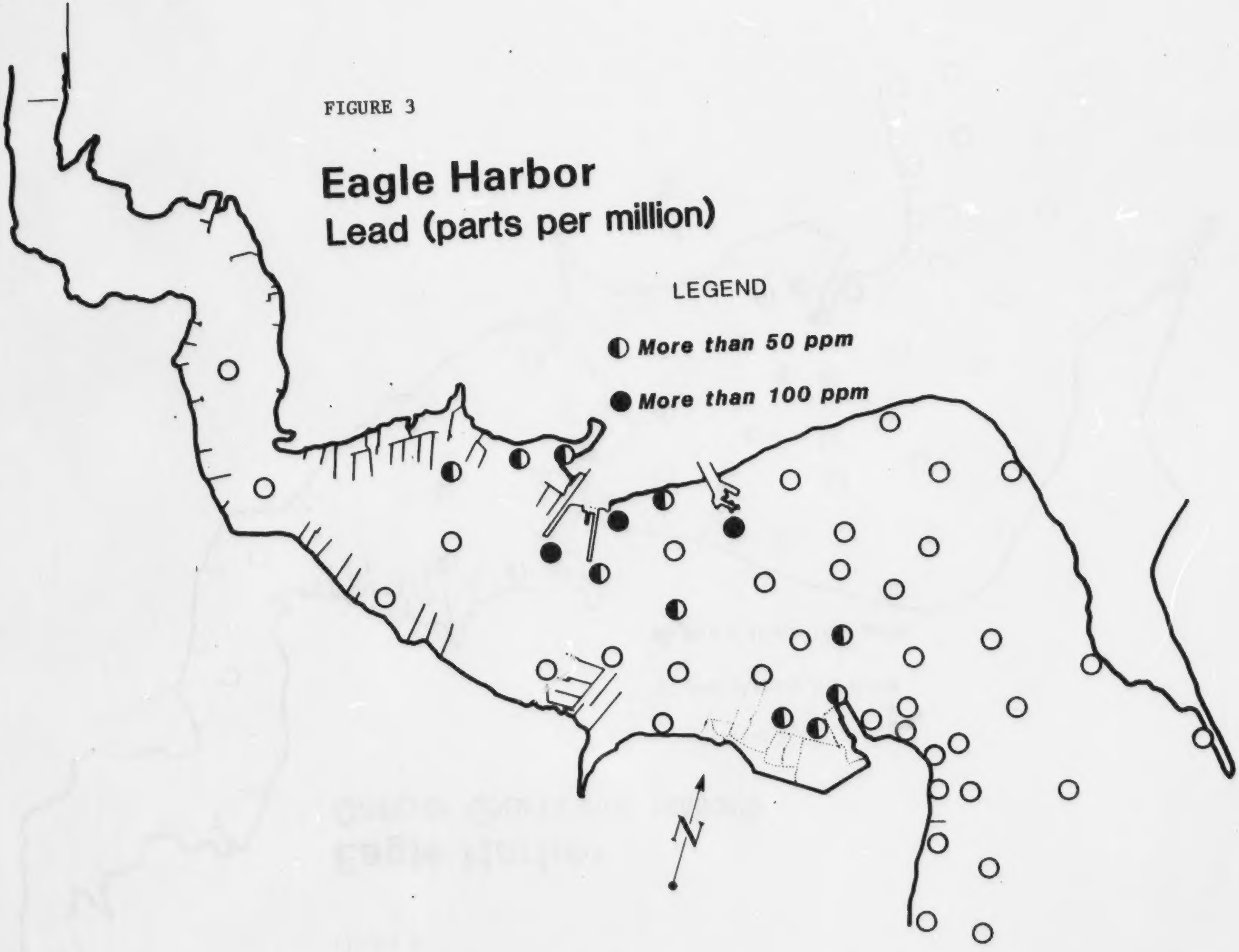
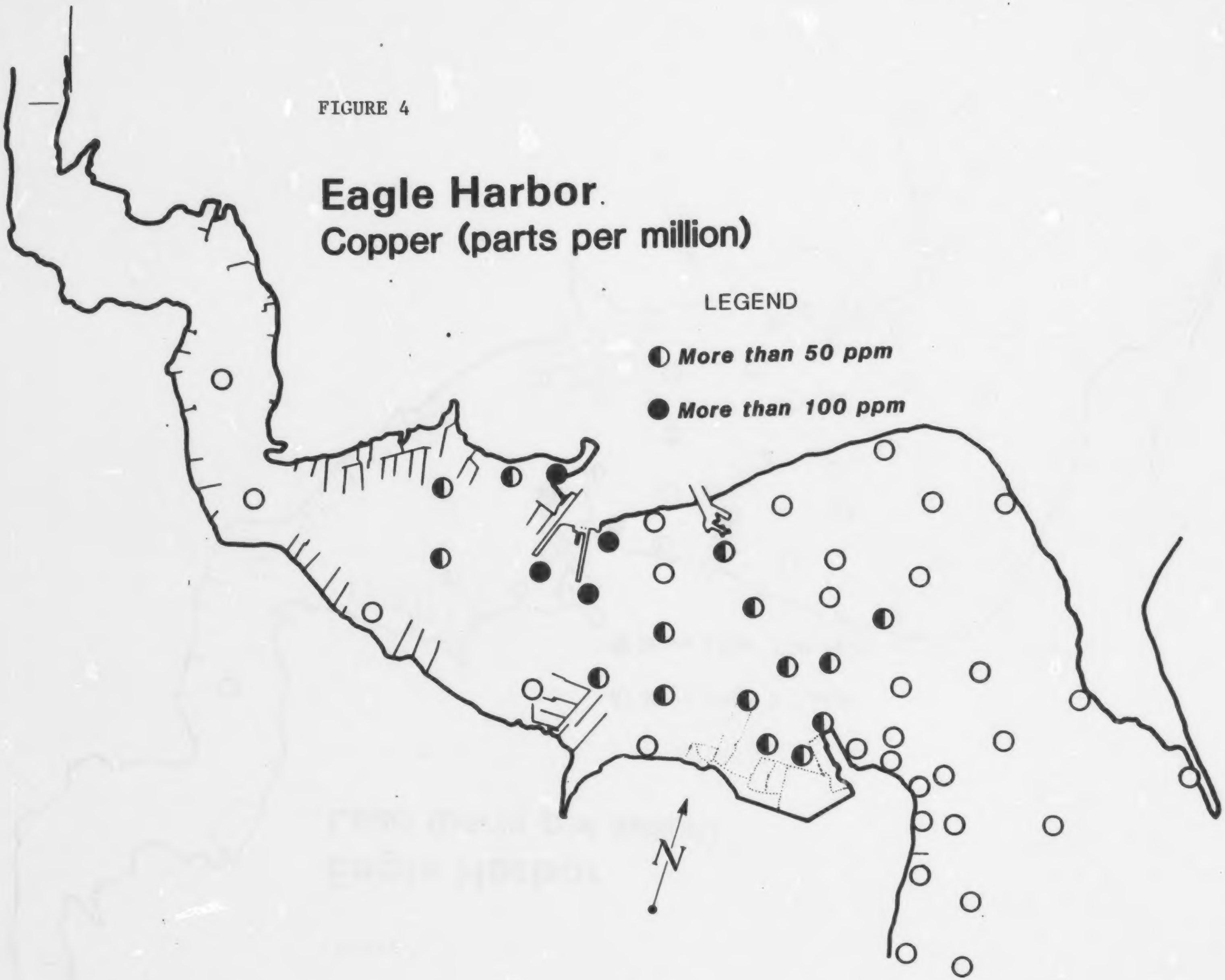

LEGEND
◐ More than 50 ppm
● More than 100 ppm
N

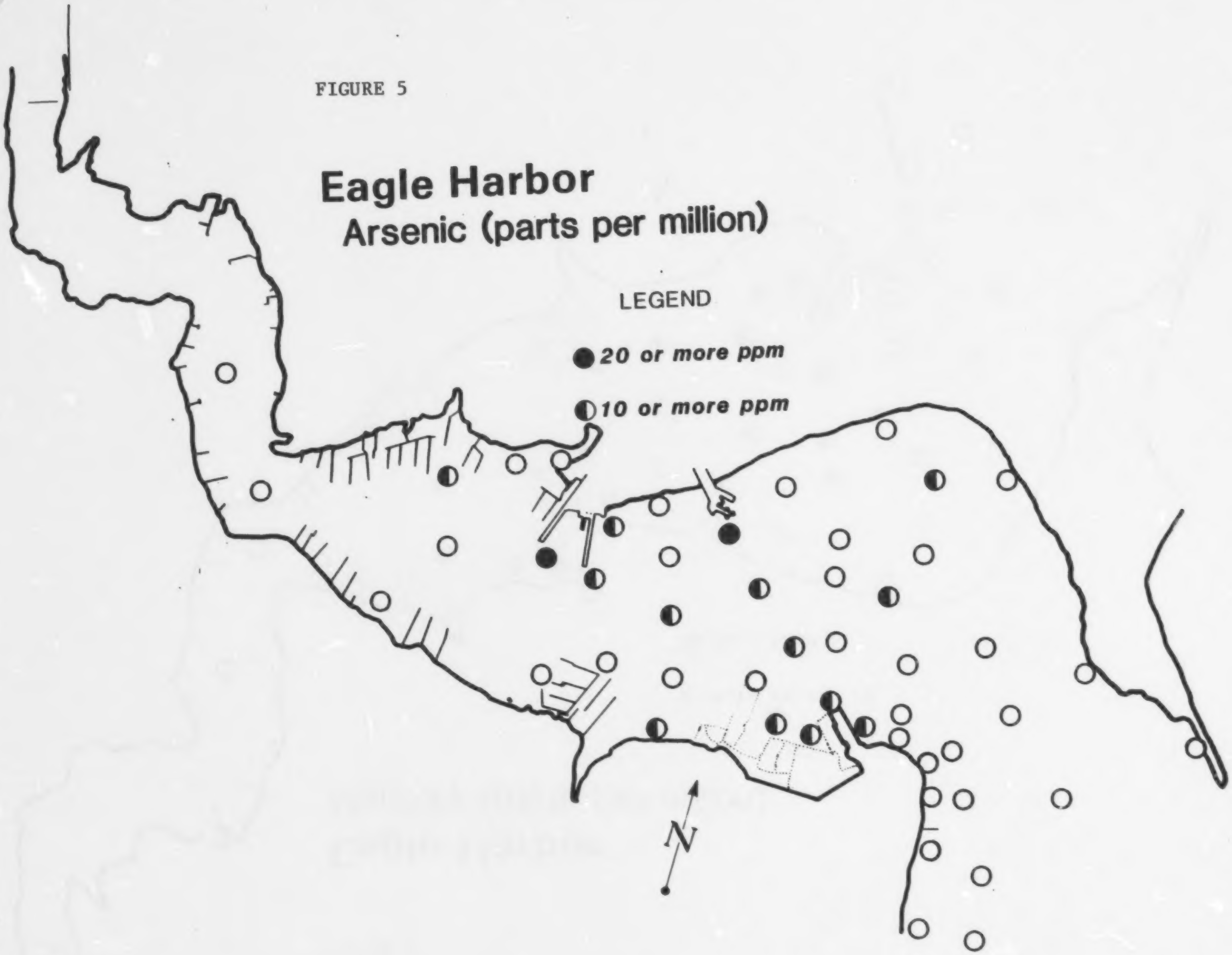
FIGURE 4



Eagle Harbor.
Copper (parts per million)

LEGEND
◐ More than 50 ppm
● More than 100 ppm
N

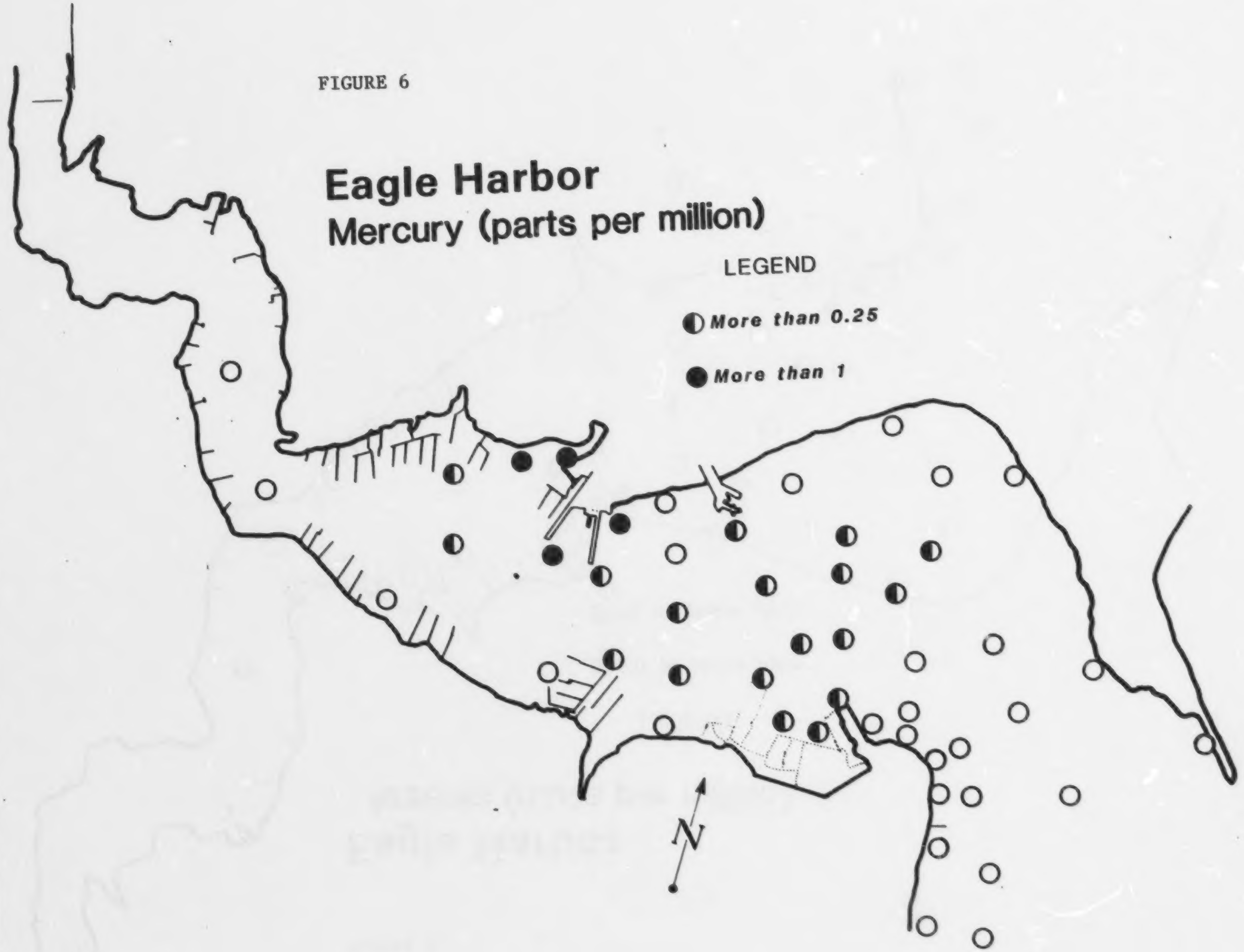
FIGURE 5



Eagle Harbor
Arsenic (parts per million)

LEGEND
● 20 or more ppm
◐ 10 or more ppm
N

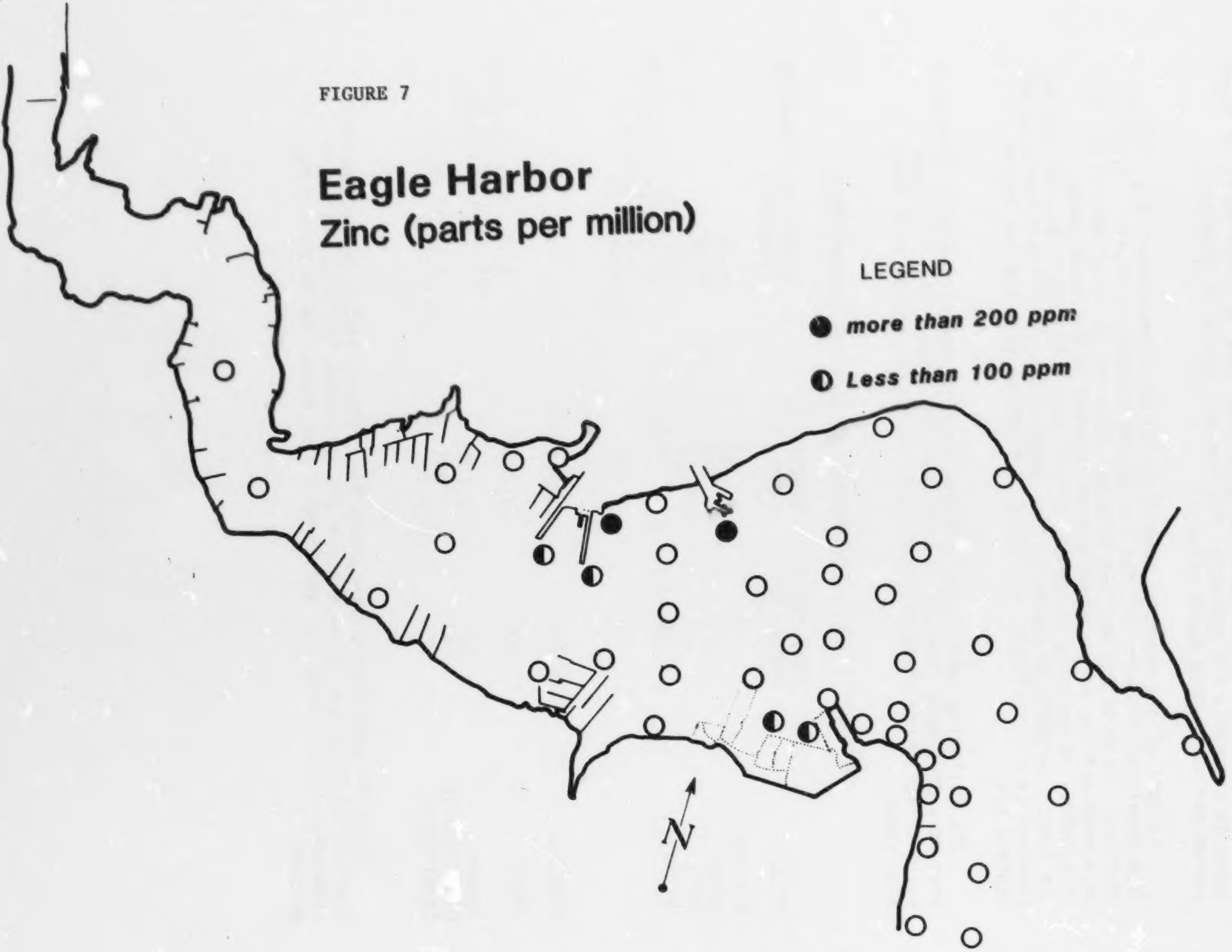
FIGURE 6



Eagle Harbor
Mercury (parts per million)

LEGEND
◐ More than 0.25
● More than 1
N

FIGURE 7



Eagle Harbor
Zinc (parts per million)

LEGEND
● more than 200 ppm
◐ Less than 100 ppm
N

POTENTIAL EFFECTS

The NOAA study on Eagle Harbor focused mainly on aromatic compounds. The highly elevated levels of PNA contamination correlated with mortality and other toxic effects. Work has also been done in other parts of Puget Sound to determine the potential for various levels of chemical contamination to show toxic effects.

As part of the remedial investigation for Commencement Bay, Tetra Tech developed "thresholds" for evaluating sediment toxicity. Synoptic chemical, toxicity and benthic infaunal data for 52 locations in the bay were examined for each contaminant of concern to evaluate these thresholds. A toxicity "apparent effect threshold" (AET) was defined as the lowest contaminant concentration above which significant toxicity was observed at all stations. A similar definition also applies to the benthic AET.

The following table shows the toxicity and benthic effects thresholds that were developed from the Commencement Bay data. The locations at Eagle Harbor where concentrations above those thresholds were found is also shown.

APPARENT EFFECTS THRESHOLDS FOR SEDIMENT CONTAMINANTS

Metals	Toxicity AET (mg/kg DW)	Benthic AET (mg/kg DW)	Locations Exceeding Threshold
Arsenic	93	85	None
Copper	310	310	None
Lead	660	300	None
Mercury	0.59	0.52	26,27,28,33,36,37,39, 40,41,43,44,51
Zinc	490	260	None
Organics	(ug/kg DW)	(ug/kg DW)	
PNA's	12,000	27,000	14,15,20,21,22,23,26, 27,28;30,37,39,51
Phenol	420	1,200	1
Dibenzofurans	540	540	14,23,27,28,30
Total PCB's	420	1,100	5

There is some consistency among the stations that show exceedences. Stations 23,27,28 and 30 were above the threshold for both PNA's and dibenzofuran. Of these, 27 and 28 were also above the threshold for mercury.

POTENTIAL SOURCES OF POLLUTION
(Figure 8)

EPA and DOE have conducted studies designed to evaluate the potential for the industrial sources located in Eagle Harbor to contribute to the pollution observed. The DOE study included Wyckoff, the Ferry Maintenance Facility and Diesel Oil Sales. EPA's historical assessment also covered those facilities, as well as other potential sources no longer operating. As a result of these studies, several potential sources of pollution to the harbor have been identified, including Wyckoff, the Ferry Maintenance Facility, an old municipal outfall, and ship traffic. The potential effects of releases from the areas of the Wyckoff and Ferry Maintenance facilities have also been evaluated through a water modelling study performed in the harbor. The following narrative highlights the findings of those studies.

Wyckoff

The Wyckoff plant has been in operation under various ownerships since 1905. The plant uses the Boulton process to treat and preserve lumber. Creosote, pentachlorophenol, and oil are used in this process.

Company records and state files show a history of spills, leaks and dumping of these chemicals on site. Creosote has been identified in the groundwater below the site to a depth of 30 feet. Seepage of oily material from the intertidal sediments surrounding the plant has been documented for at least 25 years. In August of 1984 EPA issued an order to the company under Section 3013 of RCRA. The order requires the company to conduct a study of their facility to determine whether any contaminants are migrating offsite.

Ferry Maintenance Facility (Hall Brothers Shipyard)

This portion of the harbor was operated as a shipyard from 1902 to 1959. Tar and creosote were used in the construction of wooden boats. It was common practice to dump oily water from ship bilges directly into the harbor.

This facility has been in operation by the State of Washington since 1959. Operations include a paint shop, a machine shop, a degreasing area and a solvent storage area.

Other Sources

Sewage was discharged into the harbor via outfalls from 1941 to 1978. These outfalls were located at the foot of Madison St., and 150 yards west of the Ferry Maintenance facility.

An additional potential source of pollution is from ship spills. The district Coast Guard has records that extend back only to 1982. These records do not indicate any major spills in the harbor, however, a variety of other sources such as state records report spills in earlier times. These other sources are not as reliable or as quantifiable as the Coast Guard reports, however.

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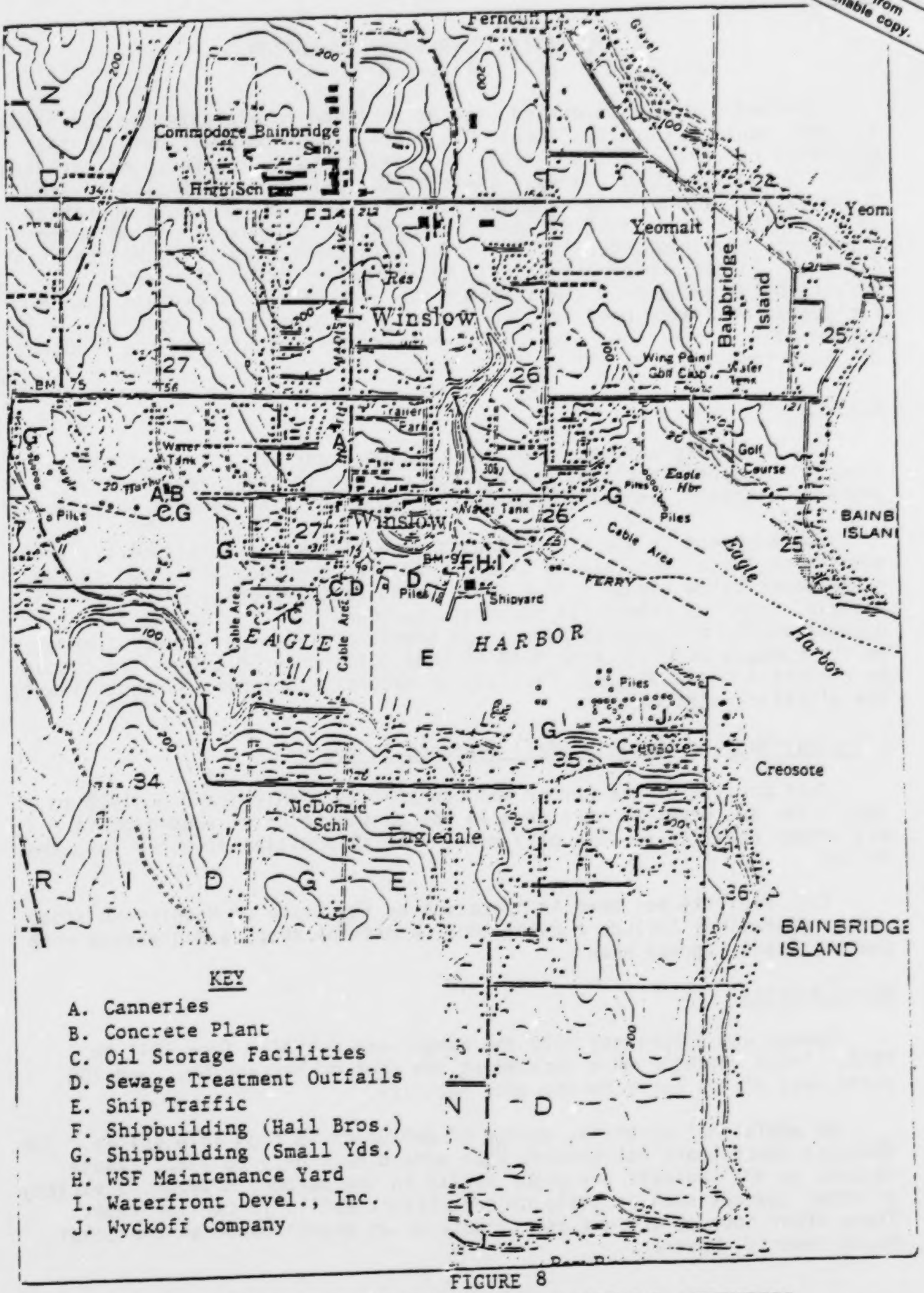
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Wing Point Golf Club
Water Tank
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Golf Course
Eagle Hbr
Piles
A.B
C.G
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Winslow
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F.H.I
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C.D
Piles
Shipyard
Cable Area
FERRY
BAINBRIDGE ISLAND
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Piles
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35
Creosote
34
McDonald Schl
Eagledale
R I D G E
36
BAINBRIDGE ISLAND
N
D
KEY
A. Canneries
B. Concrete Plant
C. Oil Storage Facilities
D. Sewage Treatment Outfalls
E. Ship Traffic
F. Shipbuilding (Hall Bros.)
G. Shipbuilding (Small Yds.)
H. WSF Maintenance Yard
I. Waterfront Devel., Inc.
J. Wyckoff Company

FIGURE 8
LOCATIONS OF COMMERCIAL AND INDUSTRIAL ACTIVITIES
EAGLE HARBOR, BAINBRIDGE ISLAND, WA

Modelling

A study of the harbor using drogues and a simple kinematic model was also performed to estimate the impacts from suspected sources. The drogue patterns verified that the major tidal flow is along the axis of the harbor. Some rotational features of the tidal movement were also noted, although no eddying effects were observed. The results of the study indicate that pollution from either the Ferry Maintenance Facility or Wyckoff could impact nearly all of the outer harbor.

CONCLUSIONS

High levels of PNA's exist in much of Eagle Harbor. This pollution has been linked to severe environmental impacts through a variety of bioassays performed by NOAA. Levels at several of the stations are also above the Apparent Effects Thresholds for sediment toxicity identified in other parts of Puget Sound.

The sediment sampling work performed by EPA in April and May of 1984 confirms the PNA levels found by NOAA. In addition, elevated levels were found near the Wyckoff plant and the Ferry Maintenance facility.

The historical assessments performed for Eagle Harbor indicate that the most likely sources of contamination are the Wyckofff facility and the Ferry Maintenance Facility (old shipyard). A simple kinematic model of the harbor shows that each of these locations have the potential to contaminate most of the inner harbor.

REFERENCES

Tetra Tech, Inc. Summary Report for the Commencement Bay Nearshore/Tideflats Remedial Investigation, EPA - 910/9-85-134A, August 1985.

Ecology & Environment, Historical Assessment of Commercial and Industrial Activity - Eagle Harbor, TDD R10-8406-12, July 1984.

Joy, Joe. Eagle Harbor Facilities Tour and Historical Review, State of Washington Department of Ecology Memo, September 4, 1984.

Yearsley, John. Hydrographic Study of Eagle Harbor - Unpublished Report, US Environmental Protection Agency Region 10, July 1985.

APPENDIX A

STUDY PROPOSAL AND QUALITY ASSURANCE PLAN

STUDY PROPOSAL AND QUALITY ASSURANCE PLAN

EAGLE HARBOR SEDIMENT SURVEY

EPA Region 10, Field Operations Section

Approvals:

Project Officer: Dan Tangarone Dan Tangarone Date 4-11-84

QA Officer: Barry Towns W. B. Towns Date 4/11/84

Supervisor: Bill Schmidt William B. Schmidt Date 4/12/84

Project Code: TEC-097A

Account No: TFA10PA00

1. PROJECT ORGANIZATION / RESPONSIBILITY

Project Officer	Dan Tangarone
QA Officer	Barry Towns
Field Operation	Dan Tangarone, EPA, ESD Mike Matta, EPA, ESD Joyce Crossen, EPA, ESD Joe Joy, DOE Art Johnson, DOE
Laboratory	Contract
Clam Collection	Joe Joy, Art Johnson, DOE
Tissue Analysis	EPA
Data Verification	Dr Joe Blazevich
Data Summarization	Field Operations Section

2. PROJECT DESCRIPTION

A. OBJECTIVE / SCOPE

Sediment and fish samples obtained by NOAA during recent studies in Eagle Harbor have indicated high contamination levels of Polynuclear Aromatic Hydrocarbons (PNA) in a location not far from a long established cresote operation. Several English sole were dissected and more than 85% were found to have tumors. The current survey will attempt to widely sample all areas of Eagle Harbor with additional emphasis on locations around the Wyckoff plant and the Washington State Ferry dock and repair facility.

Fifty (50) sediment sampling locations have been proposed in Eagle Harbor as shown on Figure 1. Samples will be collected on April 17, 18 & 19, 1984 by Van Veen dredge from the EPA boat. Several stations (1, 7, 11, 13, 25, 34, 32, 41, 42) will be located in inter-tidal, shallow water and thus serve as an indicator of sediment conditions in shellfish inhabited areas.

Joe Joy and Art Johnson, DOE, will collect approximately 10 composite clam samples and sediments from locations in the vicinity of proposed stations 1, 7, 13, 25, 34, 41, and 32 in the intertidal areas on Tuesday. Two way radios will be used for communication between the shore and boat. Adjustment of the shore transponders for the mini-ranger may be possible by the shore crew. From discussions with the EPA laboratory, approximately one to two dozen clams should be collected. Clams should be placed into glass jars and kept on ice. Cleaning and preparation of the clams will be done at the lab.

B. PROJECT SCHEDULE / MILESTONES

TV Camera Reconnaissance	4/10/84
Van Veen Dredge Sampling	4/17-19/84
Clam and Intertidal Sediments	4/17/84
Sample Shipment	4/23/84
EPA Analyses Complete By	5/10/84
Contract Analyses Complete By	5/25/84
Data Quality Assurance Review By	5/30/84
Data Summarization By	6/15/84

C DATA USAGE

Data will be used to determine the extent of sediment and clam contamination in Eagle Harbor with emphasis on the Wyckoff plant location, the Ferry Terminal Repair Yard, and certain intertidal areas.

D SAMPLE COLLECTION

Sediments other than at intertidal locations will be obtained by use of a Van Veen Stainless Steel dredge. Intertidal locations will be sampled using a shovel which will be rinsed with ambient Eagle Harbor water prior to use. The top 6 inches will be composited and placed into 16 oz glass jars with teflon lined lids using a clean stainless steel spatula. The same spatula will not be used for more than one sample. Two jars will be required at each location for analysis of:

Organics	Base-Neutrals, Acid Extractables, Pesticides, PCB, Total PNA, Carbazole & Di-Benzo-Furan
Inorganics	Metals, Sulfides, TOC, Grain Size, % Solids

In addition, at approximately ten stations, an additional sample jar will be obtained for analysis of TCDD (Dioxin).

Organic and Inorganic Traffic Reports (OTR & ITR) will be completed for all Base-Neutral/Acid samples. A Packing list will be used for transport of the 10 TCDD samples. The Case Number (2645) and SAS No 1047J will be shown on the Traffic reports. The peel-off labels will be applied to each sample. All required documentation will be completed at each site before collection of additional samples. Samples will be segregated according to destination laboratory. Organics will be shipped via Federal Express to ________________. Inorganics will be shipped to________________. TCDD samples will be shipped to ________________. Shipment will occur on 4/23.

Samples will be shipped as medium level environmental samples requiring them to be packed in plastic bags inside paint cans with vermiculite. Packing and labeling will be as required by DOT regulations.

A Field Sample Data Sheet will be used to document sample location, EPA lab number, Project Code, Date, Time, OTR Number, ITR Number, Case Number 2645, SAS Number 1047J, and other pertinent information. Sample location will be documented by Mini-Ranger. Actual station locations will be plotted on aerial photos.

E. SAMPLING EQUIPMENT

Stainless Steel Van Veen Dredge
Stainless Steel Spatulas
Large porcelain/stainless steel trays
16 oz glass jars
Bucket & Rope
pH paper
Leitz Range Finder
Mini Ranger

3. DATA QUALITY OBJECTIVES

A. PRECISION / ACCURACY / DETECTION LIMITS

Detection limits and precision and accuracy considerations will be those specified in the standard contract and analytical protocals established by the Sample Management Office.

B. DATA REPRESENTATIVENESS

Data will be representative of the specific sample locations identified in Figure 1. Grab sediment samples will be composited over the top 6 inches of depth.

C. DATA COMPARABILITY

Data will be reported according to established contract laboratory protocals. Samples will be analyzed according to approved analytical procedures. Dry weight basis is required.

D. DATA COMPLETENESS

All samples are to be analyzed with appropriate QC supportive documentation.

4. SAMPLING PROCEDURES (Including QC Checks)

Sampling procedures are described in Section 2 D.

One empty jar will be submitted to the Contract labs which perform the Organics and Inorganics analyses. A sediment jar filled with diatomaceous earth will be submitted to the lab performing the TCDD analyses to serve as a blank. These will be considered the control blank samples.

The Van Veen dredge, and gloves, will be rinsed between stations with ambient Eagle Harbor water. A clean spatula will be used at each location to transfer sediments into the sample jars.

As a control on rinse water, a sample of Eagle Harbor water will be collected for analysis by EPA for Base-Neutral and Acid Extractables.

5. SAMPLE CUSTODY PROCEDURES

Samples will be in the custody of EPA personnel. Region 10 Chain of Custody Procedures and forms will be used. A Chain of Custody form will accompany all samples. Custody seals will be placed on all shipping containers.

For intertidal samples collected by DOE personnel, EPA Chain of Custody sheets will be used as well as the Field Sample Data Sheets and Organic Traffic Reports. Samples will be transferred to the EPA soon after collection to allow timely shipment of the samples to the contract lab.

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6. CALIBRATION PROCEDURES AND PREVENTIVE MAINTAINENCE

Calibration and calibration frequencies are specified in the analytical test procedures described in the contract laboratory protocal.

7. ANALYTICAL METHODS (Including QC Checks)

All samples collected during this project will be analyzed in accordance with EPA approved methods and associated quality control procedures. For the Contract Laboratory, analytical procedures are described in the contract.

8. DOCUMENTATION - DATA REDUCTION AND REPORTING

A. DOCUMENTATION
Field Notes, Photos, Traffic Reports, Sample Packing Lists, Sample Tags, and Field Sample Data Sheets will be used to document survey sampling activities.

B. DATA REPORTING AND VALIDATION
The designated laboratories will have total responsibility for data generation and reporting. Data generated by contract labs will receive additional quality control review by the EPA Region 10 Laboratory. This will include examination of raw data, confirmation of peak shapes and resolution, precision and accuracy and verification of adequacy of QC documentation. Data generated by the EPA laboratory will be put into the Laboratory Data Management System.

9. DATA ASSESSMENT

The Field Operations Section will be responsible for data summarization and distribution to interested programs.

10. PERFORMANCE / SYSTEM AUDITS

EPA and contract laboratories participate in EPA's semi annual performance evaluation studies. The specific documentation for analyses performed for this study is a matter of record.

11. CORRECTIVE ACTION

Corrective action procedures that might be implemented from audit results or detection of unacceptable data will be developed when and where appropriate.

12. REPORTS

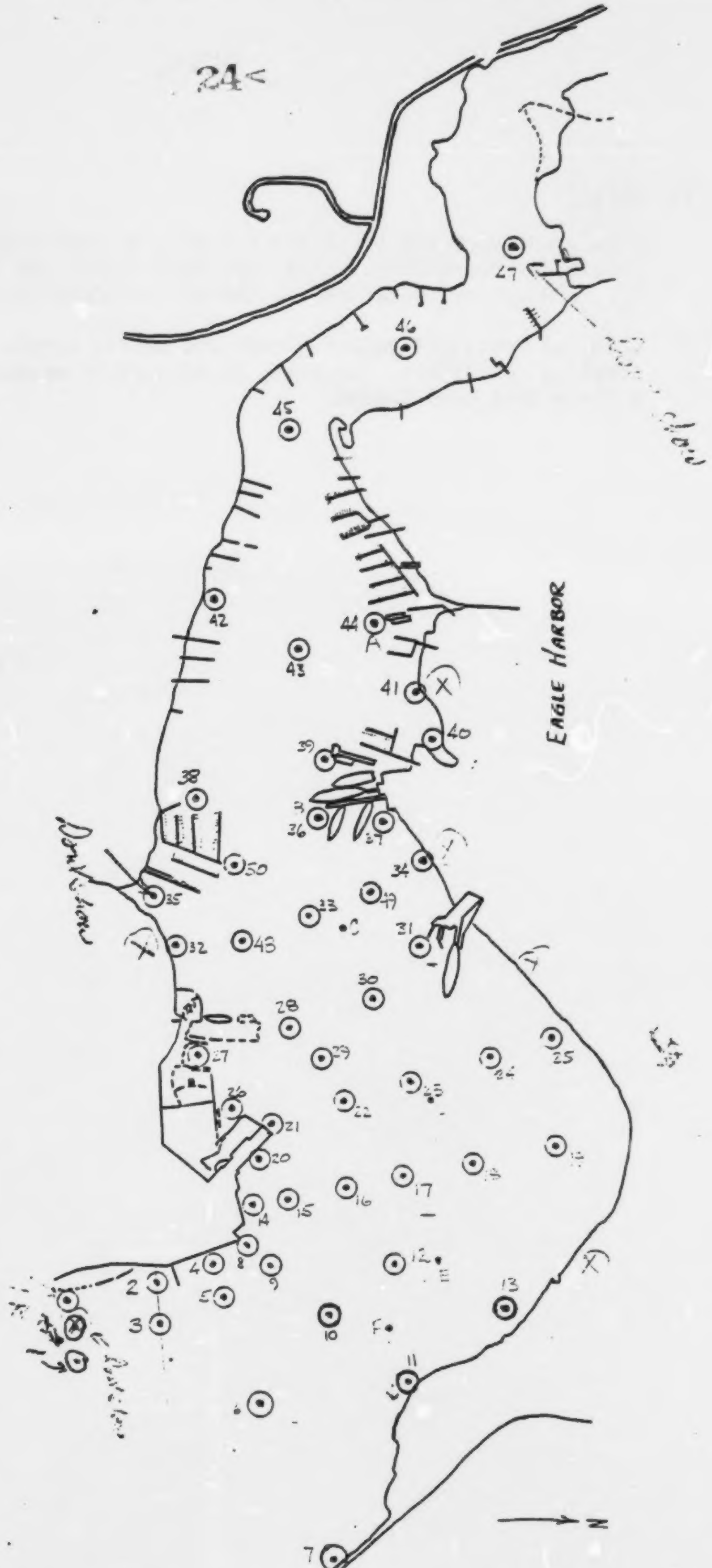
Reports development and distribution will be the responsibility of the Field Operations Section.

13. SAFETY

Life preservers and first aid kit will be available aboard the boat. Should any emergencies arise, the Coast Guard can be contacted on channel 17. EPA can be contacted via the marine operator.

Chemical resistant rubber gloves and splash aprons will be worn during sampling activities. Clothing to be used is according to a modified Level D for a boat environment.

Reproduced from best available copy.


EAGLE HARBOR
47
46
45
42
44
A
43
41
X
40
39
36
37
38
50
34
35
33
49
C
31
32
48
X
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16
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FIGURE 1

APPENDIX B

AUGUST 7, 1984 MEMO FROM DON MALINS TO GARY O'NEAL SUMMARIZING RESULTS OF NOAA STUDY

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE

Northwest and Alaska Fisheries Center
Environmental Conservation Division
2725 Montlake Boulevard East
Seattle, Washington 98112

August 7, 1984 F/NWC6:DCM

Dr. Gary O'Neal
Chief, Environmental Services Division
U.S. Environmental Protection Agency
M/S 337
1200 Sixth Avenue
Seattle, WA 98101

Dear Gary:

Dan Petke asked us to submit a summary report on our chemical and biological data from Eagle Harbor. We are pleased to provide this information herewith.

Samples of sediments and English sole were obtained from Eagle Harbor on December 8, 1983 and April 5, 1984. The sampling of Eagle Harbor was undertaken in connection with our on going studies of toxic chemicals and alterations in the health of Puget Sound marine life. The Eagle Harbor study was conducted in concert with complimentary work undertaken by EPA/DOE.

Aromatic Hydrocarbons in Sediment

Concentrations of total hydrocarbons (dry weight) in Eagle Harbor sediments are given in Figure 1. Detailed analyses of these hydrocarbons are presented in Tables I and II. In addition a variety of nitrogen-containing aromatic compounds, including the liver carcinogen carbazole, have been identified. Chlorinated organic compounds, including PCB's were found only in trace amounts. It is apparent that high concentrations of aromatic hydrocarbons, resembling those of creosote, are present in the sediments of a major portion of Eagle Harbor. In fact, a number of the sites examined contained hydrocarbon concentrations far exceeding those in Seattle's highly polluted Duwamish River.

Metals in Sediment

The concentrations of metals in sediments from Eagle Harbor and from a reference area (President Point) were generally similar. Details are available upon request.

Aromatic Hydrocarbons in English Sole

Concentrations of aromatic hydrocarbons in the stomach contents, liver and muscle of English sole are given in Figure 2. Relatively high concentrations of aromatic hydrocarbons were found, compared to the stomach contents (comprising mostly invertebrates) from fish obtained from a reference area (Port Jefferson). These data indicate that sediment-dwelling organisms that flatfish feed on appear to be a significant source of chemical exposure. Although the concentration of hydrocarbons in the sole liver is less than 1000 ppb, this value is high for exposed fish because the liver extensively converts hydrocarbons to other products. It is noteworthy that the broad scan chemical analyses of edible muscle from English sole from heavily polluted areas of Eagle Harbor failed to reveal evidence of more than trace amounts of toxic chemicals. Such trace amounts are characteristic of fish tissue from essentially non-polluted areas of Puget Sound. This finding is consistent with data from a number of studies from our laboratories.

Metabolites of Aromatic Compounds in Bile of English Sole

Two samplings indicated that metabolites structually similar to benzo(a)pyrene were present in substantially higher concentrations in the bile of English sole from Eagle Harbor than in the bile of fish from a reference area (President Point). These findings indicate that the English sole were exposed to aromatic hydrocarbons and converted them to potentially carcinogenic metabolites.

Short-term Bioassays of Eagle Harbor Sediment

Results of a variety of bioassays employing diverse test organisms indicated that Eagle Harbor sediments with the highest concentrations of hydrocarbons were acutely toxic. The evidence is summarized in Table III.

Diseases in English Sole

Gross and histopathologic examinations of English sole from Eagle Harbor were performed and the prevalences of liver tumors and other abnormalities of the liver are given in Figure IV. The evidence indicates that a large portion of the English sole population is afflicted with liver tumors (20 to 30%) and degenerative diseases of the liver (~90%)--diseases which have been linked to toxic chemical pollution in other areas of Puget Sound.

Summary

The findings from our laboratories indicate that a major portion of Eagle Harbor is severely contaminated with aromatic hydrocarbons of apparent creosote origin. These hydrocarbons are taken up by English sole and metabolized to potentially toxic substances, some of which have been linked to neoplastic diseases in laboratory studies. The essentially base-line concentration of the actively metabolized aromatic hydrocarbons in the fish muscle was not unexpected. It should not be construed, however, that the muscle of bottom-dwelling fish from other polluted areas will necessarily also have comparably low concentrations of other potential toxic chemicals.

Commensurate with the high degree of hydrocarbon pollution in Eagle Harbor are indications of serious acute and chronic biological effects. It is especially noteworthy that each of the six bioassays routinely used in our laboratories showed the sediments to be extremely toxic. In addition, the high prevalences of liver tumors and other liver abnormalities in fish obtained from several locations in Eagle Harbor are clearly long-term biological effects that are linked to the hydrocarbon exposure. In our experience, the high concentrations of toxic organic chemicals (i.e., aromatic hydrocarbons) in Eagle Harbor sediments and serious associated biological effects are unparallelled elsewhere in Puget Sound.

Sincerely,

Donald C. Malins, PhD, DSc.
Division Director

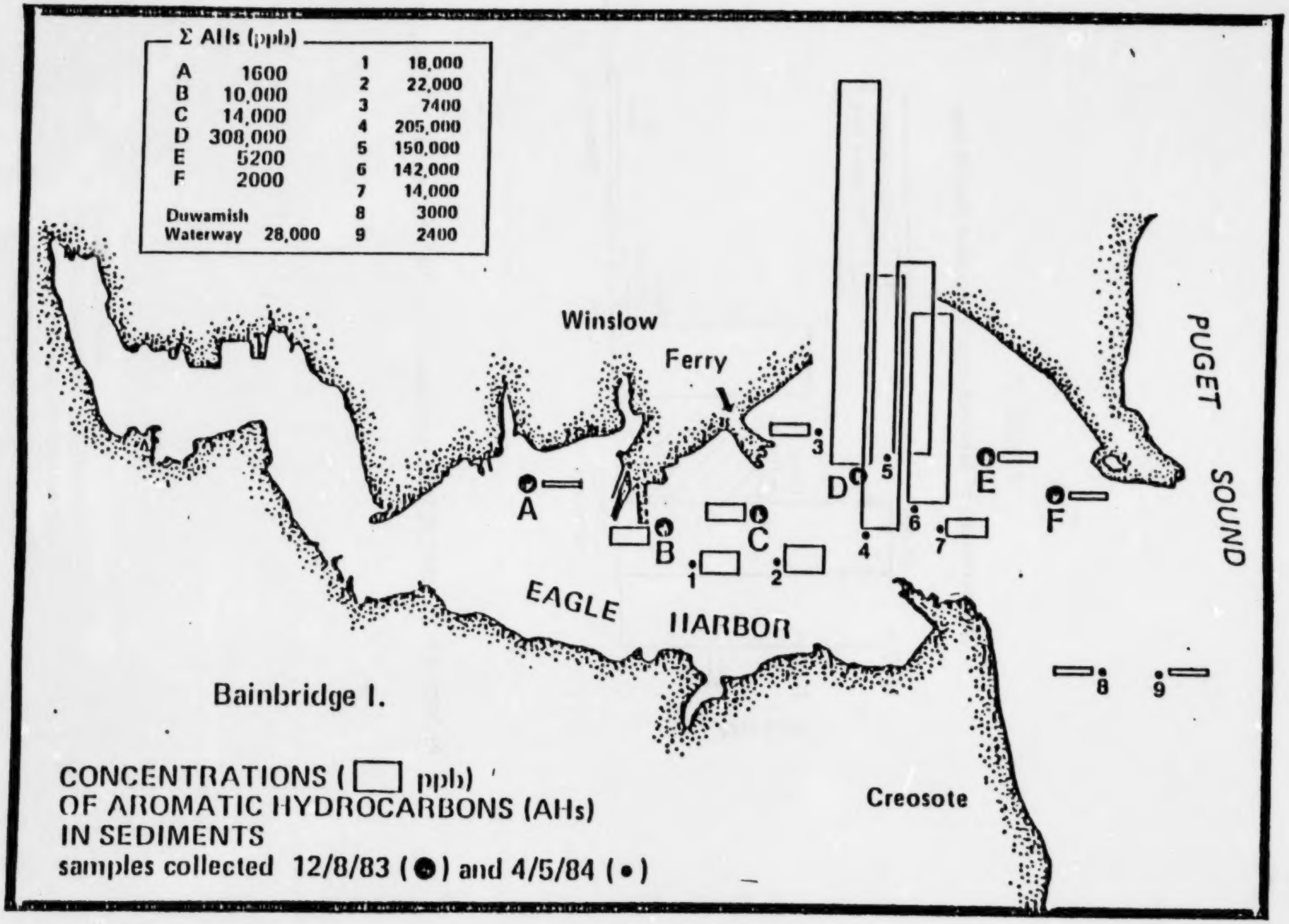
cc: D. Petke, EPA
D. Ancona, GC

REFERENCES

KRAHN, M.M., M.S. MYERS, D.G. BURROWS and D.C. MALINS (1984). Determination of metabolites of xenobiotics in bile of fish from polluted waterways. Xenobiotica (In press).

MALINS, D.C., B.B. McCAIN, D.W. BROWN, S-L. CHAN, M.S. MYERS, J.T. LANDAHL, P.G. PROHASKA, A.J. FRIEDMAN, L.D. RHODES, D.G. BURROWS, W.D. GRONLUND and H.O. HODGINS (1984). Chemical pollutants in sediments and diseases in bottom-dwelling fish in Puget Sound, Washington. Environ. Sci. Technol. (In press).

FIGURE 1



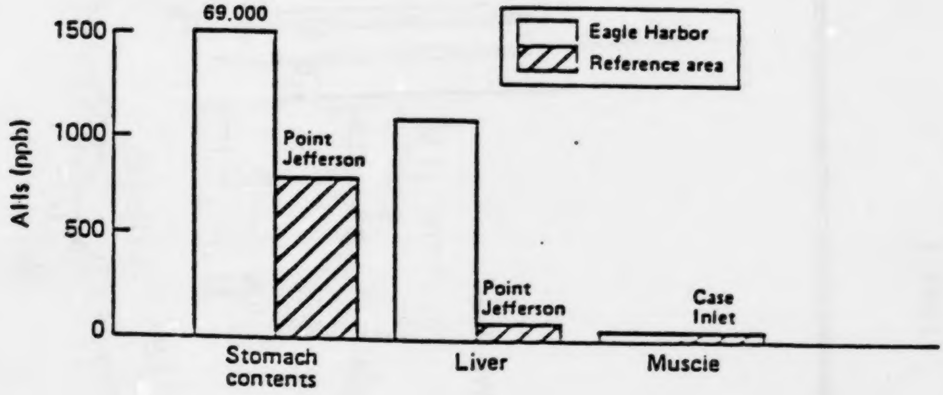
Σ AHs (ppb)
A 1600
B 10,000
C 14,000
D 308,000
E 5200
F 2000
Duwamish Waterway 28,000
1 18,000
2 22,000
3 7400
4 205,000
5 150,000
6 142,000
7 14,000
8 3000
9 2400
Winslow
Ferry
PUGET SOUND
EAGLE HARBOR
Bainbridge I.
Creosote
A
B
C
D
E
F
1
2
3
4
5
6
7
8
9

CONCENTRATIONS (▭ ppb) OF AROMATIC HYDROCARBONS (AHs) IN SEDIMENTS
samples collected 12/8/83 (●) and 4/5/84 (•)

Reference to analytical procedures: Malins et al. 1984.

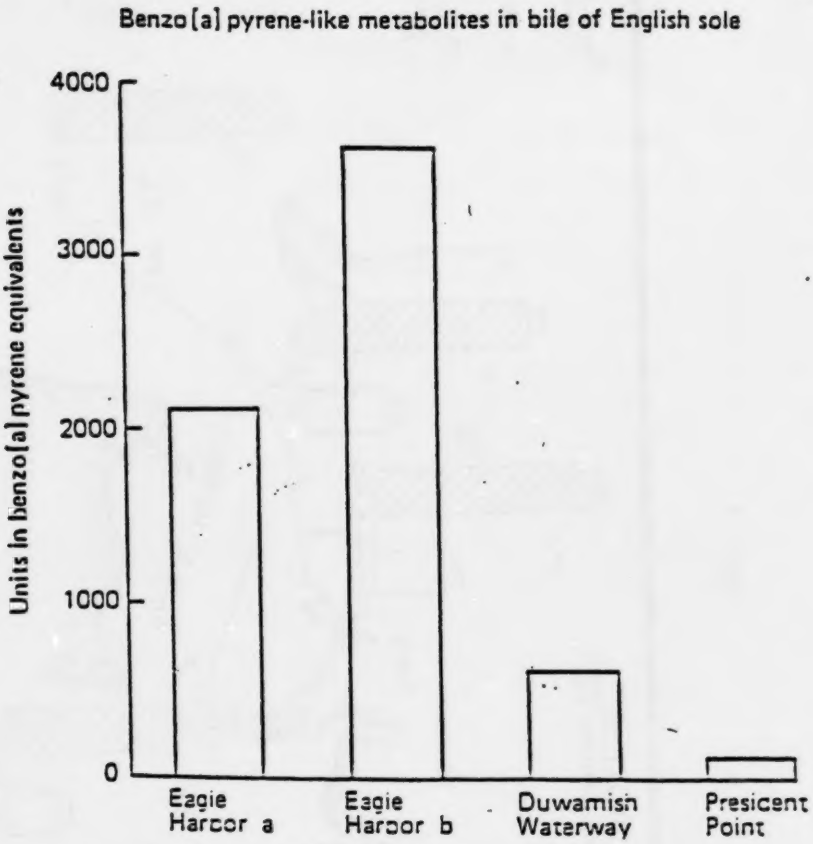
FIGURE 2

Concentrations of Aromatic Hydrocarbons in English sole



Reference to analytical procedures: Malins et al. 1984.

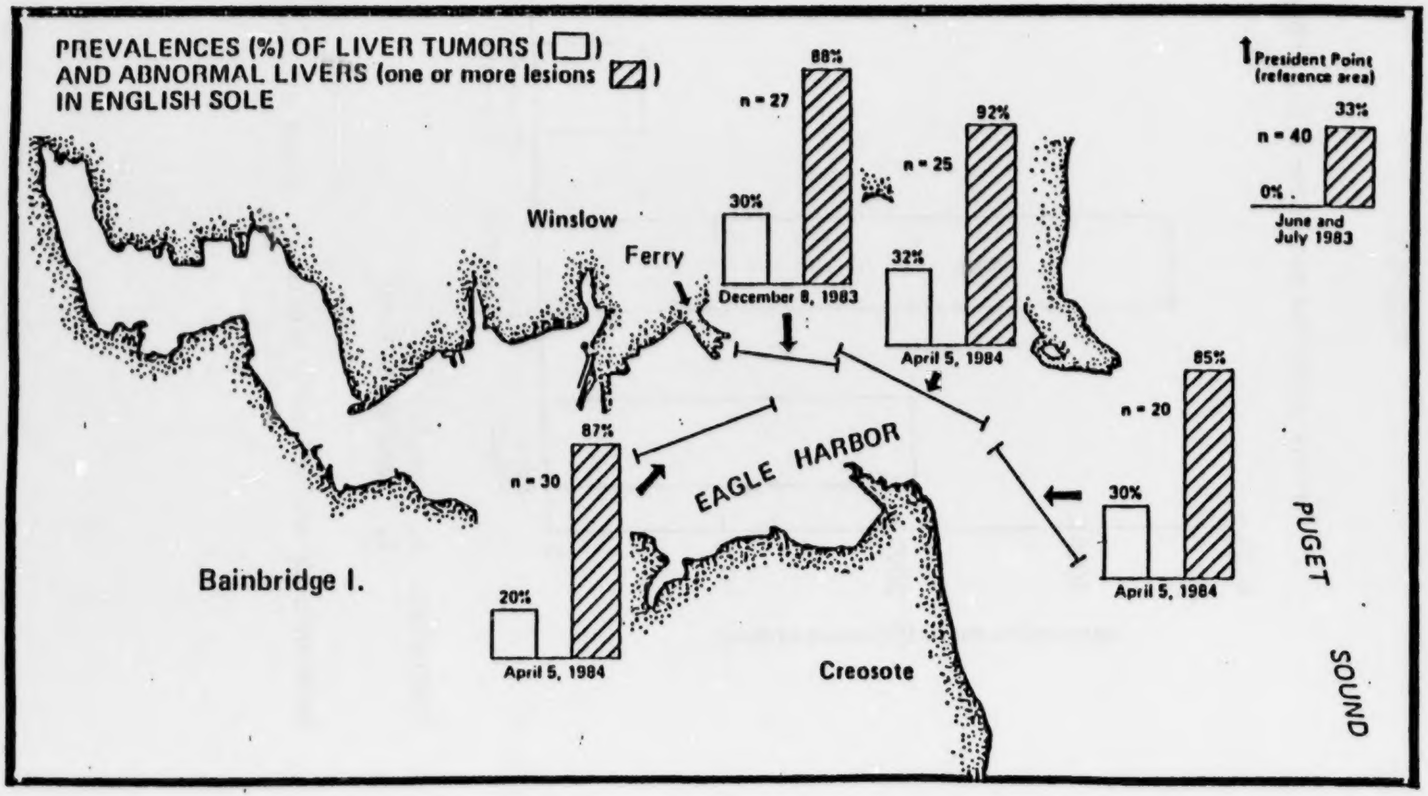
FIGURE 3



Footnotes: a. Sampled 12/8/83
b. Sampled 5/31/84

Reference to analytical procedures: Krahn et al. 1984.

FIGURE 4


PREVALENCES (%) OF LIVER TUMORS (☐)
AND ABNORMAL LIVERS (one or more lesions ▨)
IN ENGLISH SOLE
President Point
(reference area)
n = 40
0%
33%
June and
July 1983
Winslow
Ferry
n = 27
30%
88%
December 8, 1983
n = 25
32%
92%
April 5, 1984
n = 30
20%
87%
April 5, 1984
n = 20
30%
85%
April 5, 1984
EAGLE HARBOR
Bainbridge I.
Creosote
PUGET
SOUND

Reference to analytical procedures: Malins et al. 1984.

Table 1.

Concentrations of aromatic compounds in sediment samples, ng/g (ppb) dry weight.[a,b,c,d]

Site-Station:	EGH-A	EGH-B	EGH-C	EGH-D	EGH-E	EGH-F	PPT	SPIKE
i-Propyl Benzene	< 2.8	< 15	< 11	< 20	< 5.3	< 2.5	< 4.2	< 2.8
n-Propyl Benzene	< 2.8	< 15	< 11	< 20	< 5.5	< 2.6	< 4.4	< 2.8
Indan	2.9	< 14	< 10	290	5.4	< 2.4	< 4.2	< 2.6
1,2,3,4-Tetramethylbenzene	< 2.5	< 14	< 9.7	26	< 4.8	< 2.3	< 4.3	< 2.5
Naphthalene	98	220	310	8800	270	44	8.9	< 2.0
Benzothiophene	5.6	< 16	19	470	14	< 2.7	< 5.1	< 3.0
2-Methyl Naphthalene	28	59	86	5400	73	8.2	< 3.5	< 2.0
1-Methyl Naphthalene	16	30	43	5500	37	4.4	< 3.5	< 1.9
Biphenyl	10	20	38	590	33	2.4	< 1.7	< 2.0
2,6-Dimethyl Naphthalene	9.9	29	39	2200	36	< 1.8	< 1.8	< 2.1
Acenaphthene	34	53	84	22000	98	5.3	< 1.9	< 2.1
2,3,5-Trimethyl Naphthalene	< 2.0	< 11	< 7.4	1800	< 3.8	2.7	< 1.9	< 2.1
Fluorene	45	110	170	26000	140	19	34	< 2.2
Dibenzothiophene	28	92	120	9500	38	12	< 2.1	< 2.2
Phenanthrene	130	600	700	76000	470	73	150	< 1.7
Anthracene	65	350	570	25000	220	100	150	< 1.7
1-Methyl Phenanthrene	9.5	71	51	3400	36	7.7	< 1.5	< 1.6
3,6-Dimethyl Phenanthrene	3	27	30	1000	< 3.1	< 1.5	7.3	< 1.7
Fluoranthene	180	1200	1400	59000	770	94	220	< 1.6
Pyrene	240	1600	1800	32000	800	140	93	< 1.6
Benz[a]anthracene	99	820	1100	9300	370	200	71	< 2.6
Chrysene	180	1400	2200	11000	670	450	140	< 3.1
Benzofluoranthenes	100	900	1200	2400	260	160	100	< 2.0
Benzo[e]pyrene	85	760	1200	2300	300	210	43	3.6
Benzo[a]pyrene	98	740	940	2300	240	210	41	< 2.6
Perylene	18	170	270	530	64	45	17	< 2.1
Indenopyrene	42	400	520	480	110	100	30	< 3.0
Dibenz[a,h]anthracene	11	120	170	300	37	30	8.3	< 3.0
Benzo[g,h,i]perylene	37	330	470	640	100	84	23	5.2
Sample Weight (g)	20.00	20.00	20.00	20.06	20.02	20.01	20.03	20.01
% Dry Weight	78.07	51.72	51.88	63.34	74.92	79.65	78.29	67.24
Recovery of D8 Naphthalene	93%	79%	61%	100% e	85%	96%	72%	96%
Recovery of D10 Acenaphthene	83%	72%	56%	100% e	75%	84%	79%	81%
Recovery of D12 Perylene	71%	64%	52%	100% e	75%	78%	77%	50%

a The concentrations of compounds above biphenyl were calculated using D8 naphthalene as internal standard, the concentrations of compounds below pyrene using D12 perylene, and the remainder using D10 acenaphthene.

b The less than symbol (<) indicates that the chemical was not detected and that the value is the detection limit.

c Samples were collected in December, 1983 at Eagle Harbor (EGH) and Presidents Point (PPT), Washington.

d Reference to analytical procedure: Malins et al. (1984).

e Deuterated peaks too small to calculate because of dilutions.

Table II.

Concentrations of aromatic compounds in sediment samples, ng/g (ppb) dry weight.[a,b]

Site-Station:	EGH-1	EGH-2	EGH-3	EGH-4	EGH-4	EGH-5	EGH-5	EGH-5	EGH-5	EGH-6	EGH-6	EGH-7	EGH-7	EGH-8	EGH-9
i-Propyl Benzene	< 4.0	< 15	< 8.7	< 28	< 28	< 28	37	< 27	< 26	< 20	< 17	< 7.2	< 4.3	< 3.1	< 1.6
n-Propyl Benzene	< 4.3	< 16	< 9.1	1400	1500	< 29	< 28	< 28	< 27	< 21	< 18	< 7.5	< 4.7	< 3.3	< 1.7
Indan	< 4.2	< 15	< 8.7	< 29	< 29	32	< 28	300	390	69	< 18	14	< 4.6	< 3.2	< 1.7
1,2,3,4-Tetramethylbenzene	< 4.3	< 15	< 8.6	< 29	< 30	< 29	< 28	37	47	< 20	< 18	< 7.1	< 4.7	< 3.3	< 1.7
Naphthalene	440	510	160	1000	1000	1300	4300	11000	13000	2100	2100	470	580	170	150
Benzothiophene	< 5.4	38	< 10	< 35	< 35	84	< 36	710	940	130	32	29	< 5.9	< 4.1	< 2.1
2-Methyl Naphthalene	120	160	57	170	360	550	1000	4600	5000	1300	1600	200	220	14	32
1-Methyl Naphthalene	63	71	28	150	110	390	630	2500	2900	970	2000	99	82	11	13
Biphenyl	7.9	64	26	76	89	220	140	1200	1300	490	820	63	24	< 2.4	8.5
2,6-Dimethyl Naphthalene	37	63	25	< 21	30	320	59	1400	1500	610	1100	75	52	< 2.5	9.1
Acenaphthene	110	130	120	290	280	1500	1700	6300	7200	3600	8700	210	210	52	33
2,3,5-Trimethyl Naphthalene	17	< 12	13	< 23	98	120	< 24	490	540	360	980	< 5.1	< 3.3	< 2.5	< 1.4
Fluorene	180	270	150	560	2300	2200	3500	9900	9500	5700	10000	290	510	34	35
Dibenzothiophene	79	140	100	1100	1600	1100	1400	3200	3500	2000	4300	140	140	< 3.1	4.3
Phenanthrene	1100	1100	580	1800	4800	6000	16000	25000	25000	11000	30000	940	1500	170	140
Anthracene	620	790	300	4900	23000	13000	8500	17000	17000	11000	17000	540	2100	130	110
1-Methyl Phenanthrene	140	69	48	1800	2400	330	650	1200	1300	940	2200	50	110	< 2.3	11
3,6-Dimethyl Phenanthrene	50	52	< 5.9	1200	2800	150	80	260	270	250	640	19	14	< 2.4	< 1.3
Fluoranthene	2600	2000	910	71000	74000	12000	17000	16000	19000	15000	28000	1700	1900	410	220
Pyrene	2300	2200	700	48000	50000	11000	15000	22000	27000	12000	16000	1600	1700	360	290
Benz[a]anthracene	1100	1500	540	16000	15000	3600	5500	3300	3700	3100	4700	740	760	130	130
Chrysene	2700	3700	1300	22000	20000	7200	8900	7600	8300	5100	6400	1700	1600	350	250
Benzofluoranthenes	1900	3200	600	920	8900	2900	6600	3400	4000	2000	2400	1400	1400	300	270
Benzo[e]pyrene	1300	2000	600	5100	4400	1300	4300	1600	1800	930	1300	900	930	260	240
Benzo[a]pyrene	1000	1600	510	5500	4800	1500	4800	1700	2000	1100	1400	700	750	200	170
Perylene	290	430	120	1200	1000	370	1100	450	510	290	300	160	170	62	37
Indenopyrene	690	820	280	2600	2200	540	4300	540	730	310	< 30	330	370	130	100
Dibenz[a,h]anthracene	270	330	91	850	720	220	820	260	270	160	< 30	120	120	27	17
Benzo[g,h,i]perylene	800	720	190	1500	1200	410	2700	490	560	270	240	280	420	160	170
Sample Weight (g)	10.02	11.38	10.23	10.21	10.13	20.00	10.00	20.00	20.00	20.00	10.23	22.27	10.24	10.04	10.19
% Dry Weight	45.69	46.49	73.24	49.49	49.49	58.76	52.2	60.15	59.29	73.65	72.98	61.87	61.89	65.32	66.12
Recovery of D8 Naphthalene	61%	78%	88%	65%	76%	100% c	100% c	100% c	100% c	100% c	100% c	70%	51%	67%	68%
Recovery of D10 Acenaphthen	72%	78%	86%	70%	81%	100% c	100% c	100% c	100% c	100% c	100% c	73%	60%	73%	72%
Recovery of D12 Perylene	79%	78%	84%	67%	80%	100% c	100% c	100% c	100% c	100% c	100% c	83%	66%	78%	64%
Sum of the AHs	17913.9	21957	7448	189116	222587	68336	109016	142437	157257	80779	142212	12769	15662	2970	2439.9

a Samples were collected in April, 1984 at Eagle Harbor (EGH), Washington.

b Reference to analytical procedure: Malins et al.(1984).

c Deuterated peaks were to small to calculate because of dilutions

Table III. Results of Short-term Bioassays of Eagle Harbor Sediments.

Assay	Test Species	Exposure	Results
I. Amphipod-Sediment Bioassay	*Rhepoxynius abronius*	10 days to 50 mL sediment/ 900 mL seawater	Eagle Harbor: 100% mortality Dosewallips River Basin: 4% mortality
II. Pacific Oyster Larvae - Sediment Bioassay	*Cassostrea gigas*	48 hrs to 20 g sediment/1 L seawater	Eagle Harbor: 72% abnormal larvae 88% mortality Dosewallips River Basin: 1% abnormal larvae 2% mortality
III. Bacterial Bioluminescence Assay	*Photobacterium phosphoreum*	15 min. to organic extracts of sediment	Eagle Harbor: 15 min EC_{50} = 0.25 uL/mL Useless Bay: 15 min EC_{50} = 7.37 uL/mL
IV. Surf Smelt Larvae - Sediment Bioassay	*Hypomesus pretiosus*	7 days to suspended particulates prepared by mixing 20 g sediment with 1 L seawater; mixture allowed to stand 1 hr and supernatant collected	Eagle Harbor: 6% solution of particulates caused 100% mortality in 4 days Dosewallips River Basin: 100% solution of particulates caused 16% mortality in 4 days
V. Sand Dollar - Sediment Bioassay	*Dendraster excentricus*	14 days to 2 L sediment/ 37 L seawater	Eagle Harbor: 100% mortality Useless Bay: 0% mortality
VI. English Sole - Sediment Bioassay	*Parophrys vetulus*	20 hrs to 37 L sediment/ 230 L seawater	Eagle Harbor: 92% mortality Sand: 0% mortality

APPENDIX C

NOAA PUGET SOUND AREA SAMPLING SITES AND SUMMARY OF COMPARISON DATA

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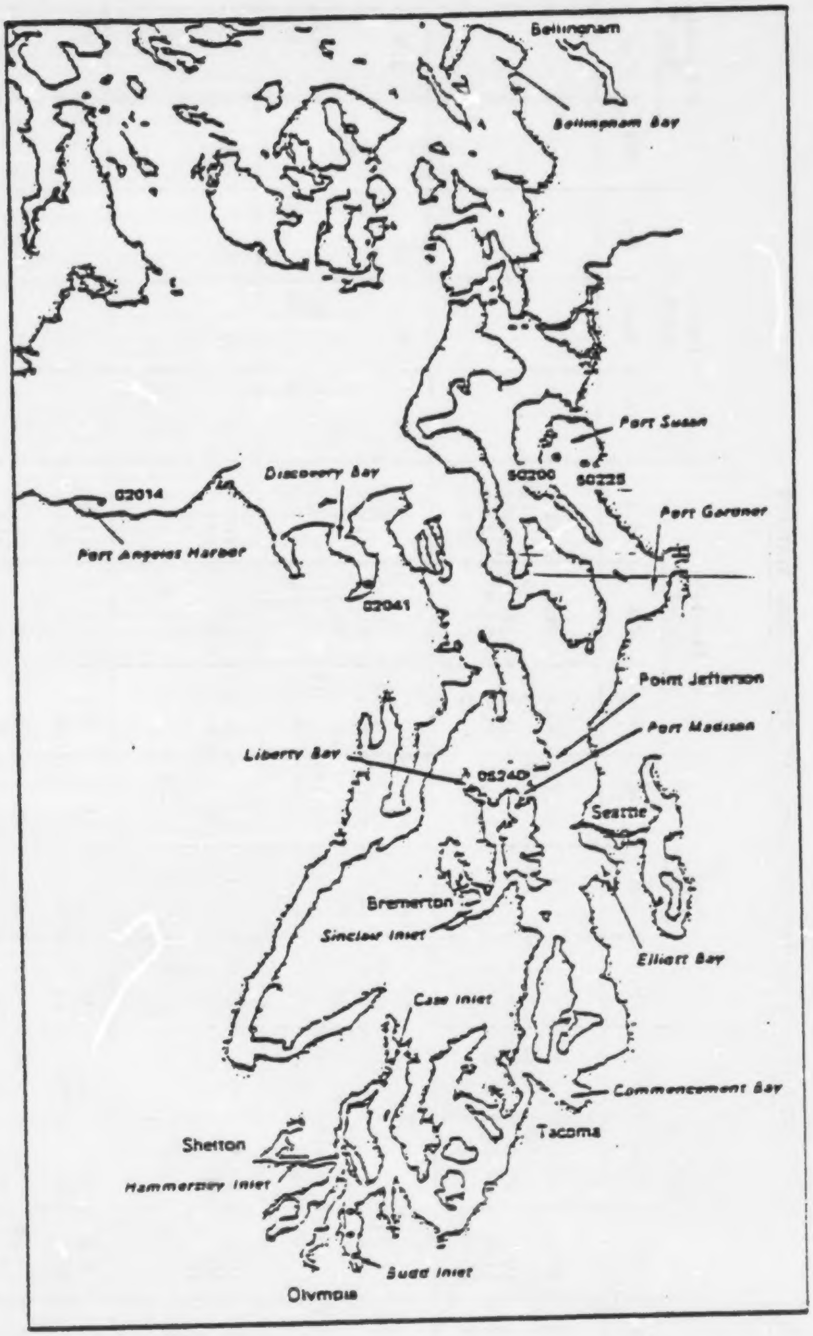
Bellingham
Bellingham Bay
Port Susan
50200
50225
Port Gardner
02014
Discovery Bay
Port Angeles Harbor
02041
Point Jefferson
Port Madison
Liberty Bay
05240
Seattle
Bremerton
Sinclair Inlet
Elliott Bay
Case Inlet
Commencement Bay
Tacoma
Shelton
Hammersley Inlet
Budd Inlet
Olympia

NOAA PUGET SOUND AREA SAMPLING SITES

COMPARISON OF CONTAMINANT LEVELS AT SELECTED NOAA STATIONS

Parameter	Case Inlet +			Port Madison +			Budd Inlet +			Sinclair Inlet +			Port Susan ++			Discovery Bay ++		
	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg
Chromium	20.9	52.7	36.8	22.8	45.6	34.2	34.6	50.1	44.7	39.4	71.5	58.4						
Beryllium	.160	.588	.374	.221	.490	.35	.433	.759	.625	.420	.633	.55						
Copper	10.2	45.0	27.6	10.4	25.8	18.1	36.6	81.1	62.7	46.8	184	128.4						
Nickel	19.4	47.0	33.2	21.5	42.0	31.8	34.8	47.6	42.4	35.5	52.9	47.0						
Zinc	23.2	82.5	52.8	26.8	61.9	44.4	55.1	118	91.4	83.2	292	192.3						
Arsenic							57	140	99				14	15	15		2.6	2.6
Silver	1.83	2.26	2.04	1.48	1.97	1.72	2.66	3.67	3.1	2.02	4.76	3.28						
Antimony	19.0	46.0	32.5	17.8	32.4	25.1	43.7	68.6	57.8	31.1	52.0	43.8						
Selenium	–	28	28	–	22	22	28	74	54	27	30	29	29					
Mercury	.024	.118	.071	.042	.113	.078	.125	.329	.246	.315	1.15	.89	.36	.58	.47		.03	
Cadmium	3.16	7.58	5.37	3.08	6.25	4.66	8.19	11.2	9.64	5.24	8.14	7.06	.860	.907	.880		.39	
Lead	7.93	23.9	15.9	10.3	20.1	15.2	22.6	60.1	44	44.2	136	100.7	21	22	22	N		
Pyrene	8.0	90	49	30	100	70	100	100	150	190	3100	1025						
Fluorene	.10	1.0	0.6	10	.40	5.2	5.0	9.0	7.0	4.0	90	36						
Acenaphthylene	.10	.40	.25	.10	.10	.10	.20	.30	.23	.2	3.0	.9						
Naphthalene	3.0	20	12	8.0	30	19	30	80	53	40	360	132						
Fluoranthene	7.0	100	54	30	80	55	80	160	123	160	2300	800						
Acenapthene	0.2	5.0	2.6	.10	3.0	1.6	9.0	10	9.7	6.0	80	31.5						
Anthracene/Phenanthrene	4.3	58	31.2	23	70	46	50	110	83	90	2180	710						
Benzo (A) Anthracene/Chrysene	6.0	40	23	40	120	80	80	200	137	260	3600	1252						
PCB - 1260	.15	1.2	.67	.40	2.0	1.2	.90	6.0	4.2	13	90	70.8						
PCB - 1254	.34	2.9	1.6	2.2	6.0	4.1	4.3	17	11	16	120	68.5						

+ Malins et.al. Chemical Contaminants and Biological Abnormalities in Central and Southern Puget Sound, NOAA Tech. Memo. OMPA-2

++ Malins et.al. Chemical Contaminants and Abnormalities in Fish and Invertebrates from Puget Sound, NOAA Tech. Memo. OMPA-19

APPENDIX D

SUMMARY TABLE OF COMPLETE LAB ANALYSES

INORGANICS -- METALS
851107

EAGLE HARBOR SURVEY
4/17-18/84 SEDIMENTS / TISSUE
5/07/84 SEDIMENTS

VALUE CODES: UNITS: MG/KG (PPM) DRY WEIGHT
U - NOT DETECTED, VALUE SHOWN IS MINIMUM QUANTIFIABLE LIMIT
M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
K - MULTIPLY VALUE SHOWN BY 1,000
ANALYSIS CODES: ALL METALS ANALYSIS PERFORMED AT ROCKY MOUNTAIN
CODES APPLY TO ORGANICS ANALYSIS ONLY
DEPTH IS IN FEET

STATION DESCRIPTION	DEP TH	ANALY SIS	M	ITR NUM	DATE	TIME	METALS PARAMETERS							
							AL	CR	BA	BE	CO	CU	FE	NI
LOCATION 1	5	P	S	MJ2301	840417	1215	4190	10	5.7	.25 U	3.2	4	5970	10
LOCATION 1A	0	M	S	MJ2331	840418	1240	7000	22	12	0.25 U	5.9	9.3	10900	21
LOCATION 2	5	P	S	MJ2313	840418	0930	3950	12	5.5	0.28 U	3.7	4.2	7120	14
LOCATION 3	5	P	S	MJ2302	840417	1233	3490	10	5 U	.25 U	2.7	3.5	5210	9.6
LOCATION 4	04	P	S	MJ2314	840418	0942	5080	15	6.3	0.25 U	4.1	5.0	7660	16
LOCATION 5	5	P	S	MJ2303	840417	1254	3480	10	5.1	.25 U	2.7	4.1	5260	10
LOCATION 6	60	P	S	MJ2304	840417	1303	5140	15	8.3	0.25 U	0.19	11	8300	15
LOCATION 7	0		S	MJ2344	840507	1330	3020	6.7	5 U	0.25 U	2.5 U	3.2	5550	7.1
LOCATION 8	5	P	S	MJ2315	840418	0953	4720	15	9.2	0.25 U	3.8	6.4	7470	16
LOCATION 9	2	P	S	MJ2305	840417	1312	3400	10	7.1	0.25 U	2.7	3.5	4980	9.1
LOCATION 10	35	P	S	MJ2306	840417	1327	5590	17	9.7	0.25 U	0.28	14	8950	16
LOCATION 11	0		S	MJ2345	840507	1345	2680	7.0	9.5	0.25 U	2.5 U	3.4	3950	6.9
LOCATION 12	40	P	S	MJ2307	840417	1336	6540	20	6.7	0.25 U	6.4	11	12500	20
LOCATION 13	13		S	MJ2346	840507	1417	4220	13	11	0.25 U	3.4	8.3	6800	12
LOCATION 14	3	P	S	MJ2316	840418	1001	4270	14	6.9	0.25 U	3.7	5.8	6840	16
LOCATION 15	12	P	S	MJ2312	840417	1607	5810	19	9.2	0.25 U	5.2	13	9570	19
LOCATION 16	35	P	S	MJ2311	840417	1558	5650	16	9.9	0.25 U	4.3	14	8520	17
LOCATION 17	54	P	S	MJ2310	840417	1532	9050	28	23	0.25 U	7.2	51	15000	25
LOCATION 18	50	P	S	MJ2309	840417	1520	8200	25	18	0.25 U	6.2	33	12700	22
LOCATION 19	45	P	S	MJ2308	840417	1505	4600	13	13	0.25 U	3.4	19	7540	11
LOCATION 20	3	P	S	MJ2317	840418	1011	9540	32	23	0.25 U	8.0	34	15500	34
LOCATION 21	35	P	S	MJ2318	840418	1029	11000	34	30	0.27	7.6	80	17600	28
LOCATION 22	38	P	S	MJ2319	840418	1040	11500	36	28	0.28	8.1	80	18400	30
LOCATION 23	45	S	S	MJ2323	840418	1230	7750	23	19	0.25 U	6.0	32	13000	21
LOCATION 24	33	M	S	MJ2324	840418	1247	6780	21	15	0.25 U	5.0	25	10500	18
LOCATION 25	0		S	MJ2347	840507	1407	5550	13	11	0.25 U	4.1	8.2	8220	15
LOCATION 26	35	S	S	MJ2320	840418	1051	13400	40	37	0.31	9.1	83	20900	34
LOCATION 27	30	S	S	MJ2321	840418	1107	12400	39	33	0.31	8.7	80	20400	32
LOCATION 28	34	S	S	MJ2322	840418	1116	11600	35	32	0.27	7.8	69	18600	29
LOCATION 29	35	M	S	MJ2325	840418	1305	11500	36	29	0.28	8.3	66	18300	30
LOCATION 30	40	M	S	MJ2326	840418	1320	9620	29	27	0.25 U	7.1	54	15400	29
LOCATION 31	35	M	S	MJ2327	840418	1341	6170	17	22	0.25 U	6.2	68	10000	15
LOCATION 32	0		S	MJ2348	840507	1505	6080	18	18	0.25 U	5.0	20	9370	19
LOCATION 33	40	M	S	MJ2330	840418	1439	10200	34	30	0.26	7.3	67	16700	27
LOCATION 34	0		S	MJ2349	840507	1430	4560	17	31	0.25 U	3.9	28	8340	18
LOCATION 36	40	I	S	MJ2334	840419	1014	9990	34	30	0.25 U	7.0	210	16100	26
LOCATION 37	10	M	S	MJ2333	840419	1008	5530	42	71	0.25 U	4.7	118	12200	21
LOCATION 38	24	I	S	MJ2336	840419	1043	4430	13	12	0.25 U	3.3	22	7200	11
LOCATION 39	40	I	S	MJ2335	840419	1026	11900	38	42	0.28	8.5	161	20800	31
LOCATION 40	4	I	S	MJ2337	840419	1052	7640	26	31	0.25 U	5.8	141	11600	23
LOCATION 41	0		S	MJ2350	840507	1445	5940	20	20	0.25 U	4.5	92	10100	18
LOCATION 42	10	I	S	MJ2338	840419	1102	4360	12	12	0.25 U	3.1	21	7890	12
LOCATION 43	33	I	S	MJ2339	840419	1109	9110	30	31	0.25 U	6.5	75	15000	24
LOCATION 44	29	I	S	MJ2342	840419	1221	9060	31	35	0.25 U	6.5	80	15500	24

EAGLE HARBOR SURVEY
4/17-18/84 SEDIMENTS / TISSUE
5/07/84 SEDIMENTS

VALUE CODES: UNITS: MG/KG (PPM) DRY WEIGHT
U - NOT DETECTED, VALUE SHOWN IS MINIMUM QUANTIFIABLE LIMIT
M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
K - MULTIPLY VALUE SHOWN BY 1,000
ANALYSIS CODES: ALL METALS ANALYSIS PERFORMED AT ROCKY MOUNTAIN
CODES APPLY TO ORGANICS ANALYSIS ONLY
DEPTH IS IN FEET

							METALS PARAMETERS							
STATION DESCRIPTION	DEPTH	ANALYSIS	M	ITR NUM	DATE	TIME	AL	CR	BA	BE	CO	CU	FE	NI
LOCATION 45	6	I	S	MJ2341	840419	1214	3400 !	8.3 !	7.2 !	0.25 U!	2.5 U!	5.4!	4690 !	6.0 !
LOCATION 46	4	I	S	MJ2340	840419	1210	3440 !	8.7 !	7.1 !	0.25 U!	2.6 !	8.3!	5760 !	8.3 !
LOCATION 48	35	M	S	MJ2329	840418	1417	9950 !	32 !	26 !	0.26 !	7.2 !	70 !	16200 !	26 !
LOCATION 49	35	M	S	MJ2332	840419	0956	5840 !	17 !	15 !	0.25 U!	4.4 !	30 !	8790 !	15 !
LOCATION 50	32	M	S	MJ2328	840418	1406	8520 !	26 !	23 !	0.25 U!	5.8 !	52 !	13100 !	21 !
LOCATION 51	45	I	S	MJ2343	840419	1252	8570 !	29 !	35 !	0.25 U!	6.2 !	111 !	14600 !	23 !

INORGANICS — METALS
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EAGLE HARBOR SURVEY
4/17-18/84 SEDIMENTS / TISSUE
5/07/84 SEDIMENTS

VALUE CODES: UNITS: MG/KG (PPM) DRY WEIGHT
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ANALYSIS CODES: ALL METALS ANALYSIS PERFORMED AT ROCKY MOUNTAIN
CODES APPLY TO ORGANICS ANALYSIS ONLY
DEPTH IS IN FEET

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							METALS PARAMETERS							
STATION DESCRIPTION	DEPTH	ANALYSIS	M	ITR NUM	DATE	TIME	MN	ZN	B	V	AG	AS	SB	SE
LOCATION 1	5	P	S	MJ2301	840417	1215	77	15		14	.5 U	6.4	1 U	1 U
LOCATION 1A	0	M	S	MJ2331	840418	1240	134	37		29	0.5 U	9.7	1 U	1 U
LOCATION 2	5	P	S	MJ2313	840418	0930	125	19		15	0.5 U	5.8	1 U	1 U
LOCATION 3	5	P	S	MJ2302	840417	1233	69	14		12	.5 U	5.5	1 U	1 U
LOCATION 4	04	P	S	MJ2314	840418	0942	106	19		19	0.5 U	7.0	1 U	1 U
LOCATION 5	5	P	S	MJ2303	840417	1254	71	13		13	.5 U	5.7	1 U	1 U
LOCATION 6	60	P	S	MJ2304	840417	1303	115	25		17	0.5 U	8.8	1 U	1 U
LOCATION 7	0		S	MJ2344	840507	1330	120	13		12	0.5 U	4.2	1 U	1 U
LOCATION 8	5	P	S	MJ2315	840418	0953	89	24		16	0.5 U	6.9	1 U	1 U
LOCATION 9	2	P	S	MJ2305	840417	1312	75	12		12	0.5 U	5.9	1 U	1 U
LOCATION 10	35	P	S	MJ2306	840417	1327	112	29		19	0.5 U	7.5	1 U	1 U
LOCATION 11	0		S	MJ2345	840507	1345	100	11		9.5	0.5 U	3.8	1 U	1 U
LOCATION 12	40	P	S	MJ2307	840417	1336	145	27		25	0.5 U	5.8	1 U	1 U
LOCATION 13	13		S	MJ2346	840507	1417	97	23		16	0.5 U	5.1	1 U	1 U
LOCATION 14	3	P	S	MJ2316	840418	1001	90	18		15	0.5 U	5.9	1 U	1 U
LOCATION 15	12	P	S	MJ2312	840417	1607	125	28		22	0.5 U	8.0	1 U	1 U
LOCATION 16	35	P	S	MJ2311	840417	1558	105	29		20	0.5 U	5.0	1 U	1 U
LOCATION 17	54	P	S	MJ2310	840417	1532	158	67		32	0.5 U	13	1 U	1 U
LOCATION 18	50	P	S	MJ2309	840417	1520	137	49		28	0.5 U	6.6	1 U	1 U
LOCATION 19	45	P	S	MJ2308	840417	1505	79	32		16	0.5 U	7.4	1 U	1 U
LOCATION 20	3	P	S	MJ2317	840418	1011	162	56		34	0.5 U	16	1 U	1 U
LOCATION 21	35	P	S	MJ2318	840418	1029	180	94		40	0.57	14	1 U	1 U
LOCATION 22	38	P	S	MJ2319	840418	1040	191	92		41	0.67	11	1 U	1 U
LOCATION 23	45	S	S	MJ2323	840418	1230	153	48		28	0.5 U	7.2	1 U	1 U
LOCATION 24	33	M	S	MJ2324	840418	1247	117	40		23	0.5 U	7.6	1 U	1 U
LOCATION 25	0		S	MJ2347	840507	1407	114	27		19	0.5 U	6.9	1 U	1 U
LOCATION 26	35	S	S	MJ2320	840418	1051	209	106		46	0.66	15	1 U	1 U
LOCATION 27	30	S	S	MJ2321	840418	1107	196	100		46	0.86	13	1 U	1 U
LOCATION 28	34	S	S	MJ2322	840418	1116	190	88		39	0.58	9.5	1 U	1 U
LOCATION 29	35	M	S	MJ2325	840418	1305	191	85		39	0.5 U	12	1 U	1 U
LOCATION 30	40	M	S	MJ2326	840418	1320	164	67		32	0.5 U	10	1 U	1 U
LOCATION 31	35	M	S	MJ2327	840418	1341	156	252		22	0.79	42	1.5	1 U
LOCATION 32	0		S	MJ2348	840507	1505	112	32		20	0.5 U	10	1 U	1 U
LOCATION 33	40	M	S	MJ2330	840418	1439	170	79		36	0.5 U	12	1 U	1 U
LOCATION 34	0		S	MJ2349	840507	1430	85	79		18	0.5 U	6.1	1 U	1 U
LOCATION 36	40	I	S	MJ2334	840419	1014	161	101		34	0.5 U	10	1 U	1 U
LOCATION 37	10	M	S	MJ2333	840419	1008	100	218		29	0.5 U	10	1 U	1 U
LOCATION 38	24	I	S	MJ2336	840419	1043	77	29		15	0.5 U	7.9	1 U	1 U
LOCATION 39	40	I	S	MJ2335	840419	1026	189	144		41	0.65	22	1 U	1 U
LOCATION 40	4	I	S	MJ2337	840419	1052	109	82		26	0.5 U	6.9	1 U	1 U
LOCATION 41	0		S	MJ2350	840507	1445	107	52		20	0.5 U	8.0	1 U	1 U
LOCATION 42	10	I	S	MJ2338	840419	1102	77	32		14	0.5 U	7.6	1 U	1 U
LOCATION 43	33	I	S	MJ2339	840419	1109	146	75		32	0.57	9.3	1 U	1 U
LOCATION 44	29	I	S	MJ2342	840419	1221	146	76		31	0.68	11	1 U	1 U

INORGANICS -- METALS
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EAGLE HARBOR SURVEY
4/17-18/84 SEDIMENTS / TISSUE
5/07/84 SEDIMENTS

VALUE CODES: UNITS: MG/KG (PPM) DRY WEIGHT
U - NOT DETECTED, VALUE SHOWN IS MINIMUM QUANTIFIABLE LIMIT
M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
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ANALYSIS CODES: ALL METALS ANALYSIS PERFORMED AT ROCKY MOUNTAIN
CODES APPLY TO ORGANICS ANALYSIS ONLY
DEPTH IS IN FEET

							METALS PARAMETERS							
STATION DESCRIPTION	DEP TH	ANALY SIS	M	ITR NUM	DATE	TIME	MN	ZN	B	V	AG	AS	SB	SE
LOCATION 45	6	I	S	MJ2341	840419	1214	63 !	14 !	!	11 !	0.5 U!	4.9!	1 U!	1 U!
LOCATION 46	4	I	S	MJ2340	840419	1210	76 !	18 !	!	11 !	0.5 U!	5.5!	1 U!	1 U!
LOCATION 48	35	M	S	MJ2329	840418	1417	155 !	77 !	!	34 !	0.51 !	9.1!	1 U!	1 U!
LOCATION 49	35	M	S	MJ2332	840419	0956	107 !	50 !	!	20 !	0.5 U!	5.5!	1 U!	1 U!
LOCATION 50	32	M	S	MJ2328	840418	1406	133 !	61 !	!	28 !	0.5 U!	7.2!	1 U!	1 U!
LOCATION 51	45	I	S	MJ2343	840419	1252	137 !	74 !	!	30 !	0.52 !	9.5!	1 U!	1 U!

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INORGANICS -- METALS
851107
                                                         VALUE CODES:                    UNITS: MG/KG (PPM) DRY WEIGHT
                                                           U - NOT DETECTED, VALUE SHOWN IS MINIMUM QUANTIFIABLE LIMIT
                        EAGLE HARBOR SURVEY                M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
                   4/17-18/84   SEDIMENTS / TISSUE         K - MULTIPLY VALUE SHOWN BY 1,000
                     5/07/84       SEDIMENTS             ANALYSIS CODES: ALL METALS ANALYSIS PERFORMED AT ROCKY MOUNTAIN
                                                           CODES APPLY TO ORGANICS ANALYSIS ONLY
                                                         DEPTH IS IN FEET

                         DEP ANALY   ITR                 ---- M E T A L S   P A R A M E T E R S ----
STATION DESCRIPTION       TH   SIS  M NUM     DATE  TIME    TL       HG       SN       CD        PB   PHENOLIC    CN
----------------------- ---  -----  - ------ ------ ----  -------- -------- -------- -------- -------- -------- --------
LOCATION 1                5    P    S MJ2301 840417 1215    .5 U!  .1    U!  1    U!  .14    !   4.3 !        !        !
LOCATION 1A               0    M    S MJ2331 840418 1240   0.5 U!  0.1   U!  1    U!  0.12   !   6.6 !        !        !
LOCATION 2                5    P    S MJ2313 840418 0930   0.5 U!  0.1   U!  1    U!  0.12   !   5.0 !        !        !
LOCATION 3                5    P    S MJ2302 840417 1233    .5 U!  .1    U!  1    U!  .14    !   3.7 !        !        !
LOCATION 4               04    P    S MJ2314 840418 0942   0.5 U!  4.0   U!  1    U!  0.14   !   4.6 !        !        !
LOCATION 5                5    P    S MJ2303 840417 1254    .5 U!  .1    U!  1    U!  .085   !   3.0 !        !        !
LOCATION 6               60    P    S MJ2304 840417 1303   0.5 U!  0.1   U!  1    U!  0.19   !   7.6 !        !        !
LOCATION 7                0         S MJ2344 840507 1330   0.5 U!  0.1   U!  1    U!  0.05  U!   2.9 !        !        !
LOCATION 8                5    P    S MJ2315 840418 0953   0.5 U!  0.12   !  1    U!  0.34   !   4.5 !        !        !
LOCATION 9                2    P    S MJ2305 840417 1312   0.5 U!  0.1   U!  1    U!  0.085  !   2.7 !        !        !
LOCATION 10              35    P    S MJ2306 840417 1327   0.5 U!  0.12   !  1    U!  0.28   !   9.8 !        !        !
LOCATION 11               0         S MJ2345 840507 1345   0.5 U!  0.17   !  3.0   !  0.06   !   2.4 !        !        !
LOCATION 12              40    P    S MJ2307 840417 1336   0.5 U!  0.1   U!  1    U!  0.05   !   9.1 !        !        !
LOCATION 13              13         S MJ2346 840507 1417   0.5 U!  0.1   U!  2.1   !  0.14   !   7.8 !        !        !
LOCATION 14               3    P    S MJ2316 840418 1001   0.5 U!  0.1   U!  1    U!  0.16   !   3.7 !        !        !
LOCATION 15              12    P    S MJ2312 840417 1607   0.5 U!  0.1    !  1    U!  0.16   !   8.6 !        !        !
LOCATION 16              35    P    S MJ2311 840417 1558   0.5 U!  0.1    !  1    U!  0.72   !   9.3 !        !        !
LOCATION 17              54    P    S MJ2310 840417 1532   0.5 U!  0.36   !  1    U!  0.56   !  29   !        !        !
LOCATION 18              50    P    S MJ2309 840417 1520   0.5 U!  0.26   !  1.1   !  0.66   !  19   !        !        !
LOCATION 19              45    P    S MJ2308 840417 1505   0.5 U!  0.22   !  2.1   !  0.38   !  14   !        !        !
LOCATION 20               3    P    S MJ2317 840418 1011   0.5 U!  0.14   !  2.0   !  0.46   !  16   !        !        !
LOCATION 21              35    P    S MJ2318 840418 1029   0.5 U!  0.79   !  2.3   !  1.1    !  50   !        !        !
LOCATION 22              38    P    S MJ2319 840418 1040   0.5 U!  0.70   !  2.1   !  1.0    !  51   !        !        !
LOCATION 23              45    S    S MJ2323 840418 1230   0.5 U!  0.28   !  1    U!  0.42   !  23   !        !        !
LOCATION 24              33    M    S MJ2324 840418 1247   0.5 U!  0.26   !  1    U!  0.60   !  18   !        !        !
LOCATION 25               0         S MJ2347 840507 1407   0.5 U!  0.20   !  2.3   !  0.10   !  12   !        !        !
LOCATION 26              35    S    S MJ2320 840418 1051   0.5 U!  0.66   !  1.8   !  1.5    !  63   !        !        !
LOCATION 27              30    S    S MJ2321 840418 1107   0.5 U!  0.56   !  2.9   !  1.3    !  55   !        !        !
LOCATION 28              34    S    S MJ2322 840418 1116   0.5 U!  0.68   !  2.4   !  0.84   !  47   !        !        !
LOCATION 29              35    M    S MJ2325 840418 1305   0.5 U!  0.53   !  1    U!  0.94   !  43   !        !        !
LOCATION 30              40    M    S MJ2326 840418 1320   0.5 U!  0.39   !  1    U!  0.76   !  38   !        !        !
LOCATION 31              35    M    S MJ2327 840418 1341   0.5 U!  0.27   !  2.9   !  0.89   ! 202   !        !        !
LOCATION 32               0         S MJ2348 840507 1505   0.5 U!  0.16   !  2.0   !  0.16   !  15   !        !        !
LOCATION 33              40    M    S MJ2330 840418 1439   0.5 U!  0.56   !  2.0   !  0.8    !  54   !        !        !
LOCATION 34               0         S MJ2349 840507 1430   0.5 U!  0.20   !  2.7   !  0.26   !  66   !        !        !
LOCATION 36              40    I    S MJ2334 840419 1014   0.5 U!  0.88   !  1.3   !  0.92   !  55   !        !        !
LOCATION 37              10    M    S MJ2333 840419 1008   0.5 U!  4.7    !  7.5   !  1.4    ! 173   !        !        !
LOCATION 38              24    I    S MJ2336 840419 1043   0.5 U!  0.30   !  1    U!  0.56   !  15   !        !        !
LOCATION 39              40    I    S MJ2335 840419 1026   0.5 U!  1.1    !  1.9   !  0.94   ! 114   !        !        !
LOCATION 40               4    I    S MJ2337 840419 1052   0.5 U!  1.3    !  2.9   !  0.28   !  97   !        !        !
LOCATION 41               0         S MJ2350 840507 1445   0.5 U!  1.3    !  2.6   !  0.12   !  60   !        !        !
LOCATION 42              10    I    S MJ2338 840419 1102   0.5 U!  0.22   !  1    U!  0.52   !  17   !        !        !
LOCATION 43              33    I    S MJ2339 840419 1109   0.5 U!  0.78   !  1    U!  0.67   !  46   !        !        !
LOCATION 44              29    I    S MJ2342 840419 1221   0.5 U!  0.78   !  1.6   !  0.64   !  52   !        !        !
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INORGANICS -- METALS
851107

                                                                 VALUE CODES:                      UNITS: MG/KG (PPM) DRY WEIGHT
                                                                   U - NOT DETECTED, VALUE SHOWN IS MINIMUM QUANTIFIABLE LIMIT
                           EAGLE HARBOR SURVEY                     M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
                     4/17-18/84   SEDIMENTS / TISSUE               K - MULTIPLY VALUE SHOWN BY 1,000
                        5/07/84      SEDIMENTS                   ANALYSIS CODES: ALL METALS ANALYSIS PERFORMED AT ROCKY MOUNTAIN
                                                                   CODES APPLY TO ORGANICS ANALYSIS ONLY
                                                                 DEPTH IS IN FEET

                              DEP ANALY   ITR                 ---- M E T A L S    P A R A M E T E R S ----
STATION DESCRIPTION            TH  SIS  M NUM     DATE  TIME     TL       HG        SN       CD        PB   PHENOLIC    CN
----------------------        --- ----- - ------ ------ ---- -------- -------- -------- -------- -------- -------- --------
LOCATION 45                     6   I   S MJ2341 840419 1214   0.5 U! 0.1    U!    1   U! 0.08   !   14   !        !        !
LOCATION 46                     4   I   S MJ2340 840419 1210   0.5 U! 0.1    U!    1   U! 0.20   !    7.1 !        !        !
LOCATION 48                    35   M   S MJ2329 840418 1417   0.5 U! 0.52    !    1   U! 0.84   !   42   !        !        !
LOCATION 49                    35   M   S MJ2332 840419 0956   0.5 U! 0.22    !    1   U! 0.39   !   22   !        !        !
LOCATION 50                    32   M   S MJ2328 840418 1406   5   U! 0.44    !    1.5  ! 0.70   !   33   !        !        !
LOCATION 51                    45   I   S MJ2343 840419 1252   0.5 U! 0.84    !    2.6  ! 0.70   !   50   !        !        !
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ORGANIC ANALYSES
851107

EAGLE HARBOR SURVEY
4/17-18/84 SEDIMENTS / TISSUE
5/07/84 SEDIMENTS

VALUE CODES: UNITS: UG/KG (PPB) DRY WEIGHT
U - NOT DETECTED, VALUE SHOWN IS MINIMUM QUANTIFIABLE LIMIT
M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
K - MULTIPLY VALUE SHOWN BY 1,000
ANALYSIS CODES: (INDICATE LAB PERFORMING ANALYSIS)
P-PEDCO, S-S CUBED, M-MEAD COMPU CHEM, W-WEST COAST TECHNICAL
DEPTH IS IN FEET

							ACID COMPOUNDS							
STATION DESCRIPTION	DEPTH	ANALYSIS	M	OTR NUM	DATE	TIME	2,4,6 TRI CHLORO PHENOL	P-CHLORO -M-CRESOL	2-CHLORO PHENOL	2,4,DI CHLORO PHENOL	2,4,DI METHYL PHENOL	2-NITRO PHENOL	4-NITRO PHENOL	2,4,DI NITRO PHENOL
LOCATION 1	5	P	S	J4601	840417	1215	40000 U!	40000 U!	40000 U!	40000 U!	40000 U!	80000 U!	200000 U!	200000 U!
LOCATION 1A	0	M	S	J4638	840418	1240	570 U!	1140 U!	570 U!	570 U!	570 U!	1140 U!	5700 U!	2850 U!
LOCATION 2	5	P	S	J4613	840418	0930	952 U!	952 U!	952 U!	952 U!	952 U!	1905 U!	4762 U!	4762 U!
LOCATION 3	5	P	S	J4602	840417	1233	17143 U!	17143 U!	17143 U!	17143 U!	17143 U!	17143 U!	85714 U!	85714 U!
LOCATION 4	04	P	S	J4614	840418	0942	666 U!	666 U!	666 U!	666 U!	666 U!	1333 U!	3333 U!	3333 U!
LOCATION 5	5	P	S	J4603	840417	1254	952 U!	952 U!	952 U!	952 U!	952 U!	1905 U!	4762 U!	4762 U!
LOCATION 6	60	P	S	J4604	840417	1303	833 U!	833 U!	833 U!	833 U!	833 U!	1667 U!	4167 U!	4167 U!
LOCATION 7	0	P	S	J4620	840417	1015	952 U!	952 U!	952 U!	952 U!	952 U!	1905 U!	4762 U!	4762 U!
LOCATION 8	5	P	S	J4615	840418	0953	1000 U!	1000 U!	1000 U!	1000 U!	1000 U!	2000 U!	5000 U!	5000 U!
LOCATION 9	2	P	S	J4605	840417	1312	1053 U!	1053 U!	1053 U!	1053 U!	1053 U!	2105 U!	5263 U!	5263 U!
LOCATION 10	35	P	S	J4606	840417	1327	741 U!	741 U!	741 U!	741 U!	741 U!	1481 U!	3704 U!	3704 U!
LOCATION 11	0	S	S	J4621	840417	1045	254 U!	254 U!	254 U!	254 U!	254 U!	508 U!	1272 U!	1272 U!
LOCATION 12	40	P	S	J4607	840417	1336	1333 U!	1333 U!	1333 U!	1333 U!	1333 U!	2667 U!	6667 U!	6667 U!
LOCATION 13	0	S	S	J4622	840417	1145	359 U!	359 U!	359 U!	359 U!	359 U!	718 U!	1796 U!	1796 U!
LOCATION 14	3	P	S	J4616	840418	1001	909 U!	15455 !	909 U!	909 U!	909 U!	1818 U!	4545 U!	4545 U!
LOCATION 15	12	P	S	J4612	840417	1607	714 U!	714 U!	714 U!	714 U!	714 U!	1428 U!	3571 U!	3571 U!
LOCATION 16	35	P	S	J4611	840417	1558	666 U!	666 U!	666 U!	666 U!	666 U!	1333 U!	3333 U!	3333 U!
LOCATION 17	54	P	S	J4610	840417	1532	714 U!	714 U!	714 U!	714 U!	714 U!	1429 U!	3571 U!	3571 U!
LOCATION 18	50	P	S	J4609	840417	1520	465 U!	465 U!	465 U!	465 U!	465 U!	930 U!	2326 U!	2326 U!
LOCATION 19	45	P	S	J4608	840417	1505	488 U!	488 U!	488 U!	488 U!	488 U!	976 U!	2439 U!	2439 U!
LOCATION 20	3	P	S	J4617	840418	1011	513 U!	513 U!	513 U!	513 U!	513 U!	1026 U!	2564 U!	2564 U!
LOCATION 21	35	P	S	J4618	840418	1029	351 U!	351 U!	351 U!	351 U!	351 U!	702 U!	1754 U!	1754 U!
LOCATION 22	38	P	S	J4619	840418	1040	345 U!	345 U!	345 U!	345 U!	345 U!	690 U!	1724 U!	1724 U!
LOCATION 23	45	S	S	J4630	840418	1230	350 U!	350 U!	350 U!	350 U!	350 U!	700 U!	1750 U!	1750 U!
LOCATION 24	33	M	S	J4631	840418	1247	470 U!	940 U!	470 U!	470 U!	470 U!	940 U!	4700 U!	2350 U!
LOCATION 25	25	S	S	J4623	840417	1210	355 U!	355 U!	355 U!	355 U!	355 U!	710 U!	1775 U!	1775 U!
LOCATION 26	35	S	S	J4627	840418	1051	11647 U!	11647 U!	11647 U!	11647 U!	11647 U!	23294 U!	58236 U!	23294 U!
LOCATION 27	30	S	S	J4628	840418	1107	756 U!	756 U!	756 U!	756 U!	756 U!	1513 U!	3784 U!	3784 U!
LOCATION 28	34	S	S	J4629	840418	1116	8027 U!	8027 U!	8027 U!	8027 U!	8027 U!	16055 U!	40137 U!	40137 U!
LOCATION 29	35	M	S	J4632	840418	1305	460 U!	920 U!	460 U!	460 U!	460 U!	920 U!	4600 U!	2300 U!
LOCATION 30	40	M	S	J4633	840418	1320	860 U!	1720 U!	860 U!	860 U!	860 U!	1720 U!	8600 U!	4300 U!
LOCATION 31	35	M	S	J4634	840418	1341	700 U!	1400 U!	700 U!	700 U!	700 U!	1400 U!	7000 U!	3500 U!
LOCATION 32	0	S	S	J4624	840417	1415	269 U!	269 U!	269 U!	269 U!	269 U!	538 U!	1346 U!	1346 U!
LOCATION 33	40	M	S	J4637	840418	1439	776 U!	1552 U!	776 U!	776 U!	776 U!	1552 U!	7760 U!	3880 U!
LOCATION 34	0	S	S	J4625	840417	1240	322 U!	322 U!	322 U!	322 U!	322 U!	644 U!	1610 U!	1610 U!
LOCATION 36	40	I	S	J4641	840419	1014	444 U!	444 U!	444 U!	444 U!	444 U!	444 U!	444 U!	444 U!
LOCATION 37	10	M	S	J4640	840419	1008	772 U!	1544 U!	772 U!	772 U!	772 U!	1544 U!	7720 U!	3860 U!
LOCATION 38	24	I	S	J4643	840419	1043	313 U!	313 U!	313 U!	313 U!	313 U!	313 U!	313 U!	313 U!
LOCATION 39	40	I	S	J4642	840419	1026	488 U!	488 U!	488 U!	488 U!	488 U!	488 U!	488 U!	488 U!
LOCATION 40	4	I	S	J4644	840419	1052	385 U!	385 U!	385 U!	385 U!	385 U!	385 U!	385 U!	385 U!
LOCATION 41	0	S	S	J4626	840417	1320	230 U!	230 U!	230 U!	230 U!	230 U!	461 U!	1152 U!	1152 U!
LOCATION 42	10	I	S	J4645	840419	1102	290 U!	290 U!	290 U!	290 U!	290 U!	290 U!	290 U!	290 U!
LOCATION 43	33	I	S	J4646	840419	1109	425 U!	425 U!	425 U!	425 U!	425 U!	425 U!	425 U!	425 U!
LOCATION 44	29	I	S	J4649	840419	1221	400 U!	400 U!	400 U!	400 U!	400 U!	400 U!	400 U!	400 U!

ORGANIC ANALYSES
851107

EAGLE HARBOR SURVEY
4/17-18/84 SEDIMENTS / TISSUE
5/07/84 SEDIMENTS

VALUE CODES: UNITS: UG/KG (PPB) DRY WEIGHT
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P-PEDCO, S-S CUBED, M-MEAD COMPU CHEM, W-WEST COAST TECHNICAL
DEPTH IS IN FEET

							ACID COMPOUNDS							
STATION DESCRIPTION	DEP TH	ANALY SIS	M	OTR NUM	DATE	TIME	2,4,6 TRI CHLORO PHENOL	P- CHLORO -M- CRESOL	2- CHLORO PHENOL	2,4,DI CHLORO PHENOL	2,4,DI METHYL PHENOL	2- NITRO PHENOL	4- NITRO PHENOL	2,4,DI NITRO PHENOL
LOCATION 45	6	I	S	J4648	840419	1214	286 U!	286 U!	286 U!	286 U!	286 U!	286 U!	286 U!	286 U!
LOCATION 46	4	I	S	J4647	840419	1210	294 U!	294 U!	294 U!	294 U!	294 U!	294 U!	294 U!	294 U!
LOCATION 48	35	M	S	J4636	840418	1417	725 U!	1450 U!	725 U!	725 U!	725 U!	1450 U!	7250 U!	3625 U!
LOCATION 49	35	M	S	J4639	840419	0956	720 U!	1440 U!	720 U!	720 U!	720 U!	1440 U!	7200 U!	3600 U!
LOCATION 50	32	M	S	J4635	840418	1406	710 U!	1420 U!	710 U!	710 U!	710 U!	1420 U!	7100 U!	3550 U!
LOCATION 51	45	I	S	J4650	840419	1252	12500 U!	12500 U!	12500 U!	12500 U!	12500 U!	12500 U!	12500 U!	12500 U!

ORGANIC ANALYSES
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4/17-18/84 SEDIMENTS / TISSUE
5/07/84 SEDIMENTS

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DEPTH IS IN FEET

STATION DESCRIPTION	DEP TH	ANALY SIS	M	OTR NUM	DATE	TIME	ACID COMPOUNDS 4,6,DI NITRO PHENOL	PENTA CHLORO PHENOL	PHENOL
LOCATION 1	5	P	S	J4601	840417	1215	80000 U!	40000 U!	608333 !
LOCATION 1A	0	M	S	J4638	840418	1240	1140 U!	1140 U!	570 U!
LOCATION 2	5	P	S	J4613	840418	0930	1905 U!	952 U!	952 U!
LOCATION 3	5	P	S	J4602	840417	1233	34286 U!	17143 U!	17143 U!
LOCATION 4	04	P	S	J4614	840418	0942	1333 U!	666 U!	666 U!
LOCATION 5	5	P	S	J4603	840417	1254	1905 U!	952 U!	952 U!
LOCATION 6	60	P	S	J4604	840417	1303	1667 U!	833 U!	833 U!
LOCATION 7	0	P	S	J4620	840417	1015	1905 U!	952 U!	952 U!
LOCATION 8	5	P	S	J4615	840418	0953	2000 U!	1000 U!	1000 U!
LOCATION 9	2	P	S	J4605	840417	1312	2105 U!	1053 U!	1053 U!
LOCATION 10	35	P	S	J4606	840417	1327	1481 U!	741 U!	741 U!
LOCATION 11	0	S	S	J4621	840417	1045	508 U!	254 U!	254 M!
LOCATION 12	40	P	S	J4607	840417	1336	2667 U!	1333 U!	1333 U!
LOCATION 13	0	S	S	J4622	840417	1145	718 U!	359 U!	359 M!
LOCATION 14	3	P	S	J4616	840418	1001	1818 U!	909 U!	909 U!
LOCATION 15	12	P	S	J4612	840417	1607	1428 U!	714 U!	714 U!
LOCATION 16	35	P	S	J4611	840417	1558	1333 U!	666 U!	666 U!
LOCATION 17	54	P	S	J4610	840417	1532	1429 U!	714 U!	714 U!
LOCATION 18	50	P	S	J4609	840417	1520	930 U!	465 U!	465 U!
LOCATION 19	45	P	S	J4608	840417	1505	976 U!	488 U!	488 U!
LOCATION 20	3	P	S	J4617	840418	1011	1026 U!	513 U!	513 U!
LOCATION 21	35	P	S	J4618	840418	1029	702 U!	351 U!	351 U!
LOCATION 22	38	P	S	J4619	840418	1040	690 U!	345 U!	345 U!
LOCATION 23	45	S	S	J4630	840418	1230	700 U!	350 U!	350 U!
LOCATION 24	33	M	S	J4631	840418	1247	940 U!	940 U!	470 U!
LOCATION 25	25	S	S	J4623	840417	1210	710 U!	355 U!	355 U!
LOCATION 26	35	S	S	J4627	840418	1051	58236 U!	11647 U!	11647 U!
LOCATION 27	30	S	S	J4628	840418	1107	1513 U!	756 U!	756 U!
LOCATION 28	34	S	S	J4629	840418	1116	16055 U!	8027 U!	8027 U!
LOCATION 29	35	M	S	J4632	840418	1305	1920 U!	1920 U!	460 U!
LOCATION 30	40	M	S	J4633	840418	1320	1720 U!	1720 U!	860 U!
LOCATION 31	35	M	S	J4634	840418	1341	1400 U!	1400 U!	700 U!
LOCATION 32	0	S	S	J4624	840417	1415	538 U!	269 U!	269 U!
LOCATION 33	40	M	S	J4637	840418	1439	1552 U!	1552 U!	776 U!
LOCATION 34	0	S	S	J4625	840417	1240	644 U!	322 U!	322 U!
LOCATION 36	40	I	S	J4641	840419	1014	444 U!	444 U!	444 U!
LOCATION 37	10	M	S	J4640	840419	1008	1544 U!	1544 U!	772 U!
LOCATION 38	24	I	S	J4643	840419	1043	313 U!	313 U!	313 U!
LOCATION 39	40	I	S	J4642	840419	1026	488 U!	488 U!	488 U!
LOCATION 40	4	I	S	J4644	840419	1052	385 U!	385 U!	385 U!
LOCATION 41	0	S	S	J4626	840417	1320	461 U!	230 U!	230 M!
LOCATION 42	10	I	S	J4645	840419	1102	290 U!	290 U!	290 U!
LOCATION 43	33	I	S	J4646	840419	1109	425 U!	425 U!	425 U!
LOCATION 44	29	I	S	J4649	840419	1221	400 U!	400 U!	400 U!

ORGANIC ANALYSES
851107

EAGLE HARBOR SURVEY
4/17-18/84 SEDIMENTS / TISSUE
5/07/84 SEDIMENTS

VALUE CODES: UNITS: UG/KG (PPB) DRY WEIGHT
U - NOT DETECTED, VALUE SHOWN IS MINIMUM QUANTIFIABLE LIMIT
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K - MULTIPLY VALUE SHOWN BY 1,000
ANALYSIS CODES: (INDICATE LAB PERFORMING ANALYSIS)
P-PEDCO, S-S CUBED, M-MEAD COMPU CHEM, W-WEST COAST TECHNICAL
DEPTH IS IN FEET

							A C I D C O M P O U N D S		
STATION DESCRIPTION	DEP TH	ANALY SIS	M	OTR NUM	DATE	TIME	4,6,DI NITRO PHENOL	PENTA CHLORO PHENOL	PHENOL
LOCATION 45	6	I	S	J4648	840419	1214	286 U!	286 U!	286 U!
LOCATION 46	4	I	S	J4647	840419	1210	294 U!	294 U!	294 U!
LOCATION 48	35	M	S	J4636	840418	1417	1450 U!	1450 U!	725 U!
LOCATION 49	35	M	S	J4639	840419	0956	1440 U!	1440 U!	720 U!
LOCATION 50	32	M	S	J4635	840418	1406	1420 U!	1420 U!	710 U!
LOCATION 51	45	I	S	J4650	840419	1252	12500 U!	12500 U!	12500 U!

ORGANIC ANALYSES
851107

EAGLE HARBOR SURVEY
4/17-18/84 SEDIMENTS / TISSUE
5/07/84 SEDIMENTS

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P-PEDCO, S-S CUBED, M-MEAD COMPU CHEM, W-WEST COAST TECHNICAL
DEPTH IS IN FEET

							PESTICIDES							
STATION DESCRIPTION	DEPTH	ANALYSIS	M	OTR NUM	DATE	TIME	ALDRIN	DIELDRIN	CHLORDANE	4,4'-DDT	4,4'-DDE	4,4'-DDD	A-ENDOSULFAN	B-ENDOSULFAN
LOCATION 1	5	P	S	J4601	840417	1215	0.42 U!	0.42 U!	0.42 U!	0.83 U!	0.42 U!	0.83 U!	0.42 U!	0.42 U!
LOCATION 1A	0	M	S	J4638	840418	1240	5.6 U!	5.6 U!	5.6 U!	5.6 U!	5.6 U!	5.6 U!	5.6 U!	5.6 U!
LOCATION 2	5	P	S	J4613	840418	0930	0.48 U!	0.48 U!	0.48 U!	0.95 U!	0.48 U!	0.95 U!	0.48 U!	0.48 U!
LOCATION 3	5	P	S	J4602	840417	1233	91 U!	91 U!	91 U!	182 U!	91 U!	182 U!	91 U!	91 U!
LOCATION 4	04	P	S	J4614	840418	0942	0.33 U!	0.33 U!	0.33 U!	0.66 U!	0.33 U!	0.66 U!	0.33 U!	0.33 U!
LOCATION 5	5	P	S	J4603	840417	1254	95 U!	95 U!	95 U!	190 U!	95 U!	190 U!	95 U!	95 U!
LOCATION 6	60	P	S	J4604	840417	1303	0.42 U!	0.42 U!	0.42 U!	0.84 U!	0.42 U!	0.84 U!	0.42 U!	0.42 U!
LOCATION 7	0	P	S	J4620	840417	1015	10 U!	0.48 U!	0.48 U!	0.95 U!	10 U!	0.95 U!	10 U!	0.48 U!
LOCATION 8	5	P	S	J4615	840418	0953	0.5 U!	0.5 U!	0.5 U!	1 U!	0.5 U!	1 U!	0.5 U!	0.5 U!
LOCATION 9	2	P	S	J4605	840417	1312	0.53 U!	0.53 U!	0.53 U!	1.0 U!	0.53 U!	1.0 U!	0.53 U!	0.53 U!
LOCATION 10	35	P	S	J4606	840417	1327	0.37 U!	0.37 U!	0.37 U!	0.74 U!	0.37 U!	0.74 U!	0.37 U!	0.37 U!
LOCATION 11	0	S	S	J4621	840417	1045	1.590U!	1.590U!	15.900U!	3.180U!	1.590U!	3.180U!	1.590U!	1.590U!
LOCATION 12	40	P	S	J4607	840417	1336	0.66 U!	0.66 U!	0.66 U!	1.3 U!	0.66 U!	1.3 U!	0.66 U!	0.66 U!
LOCATION 13	0	S	S	J4622	840417	1145	2.130U!	2.130U!	21.300U!	4.260U!	2.130U!	4.260U!	2.130U!	2.130U!
LOCATION 14	3	P	S	J4616	840418	1001	0.45 M!	0.45 U!	0.45 U!	0.90 U!	0.45 U!	0.90 U!	0.45 U!	0.45 U!
LOCATION 15	12	P	S	J4612	840417	1607	0.36 U!	0.36 U!	0.36 U!	0.71 U!	0.36 U!	0.71 U!	0.36 U!	0.36 U!
LOCATION 16	35	P	S	J4611	840417	1558	3.3 M!	3.3 U!	3.3 U!	6.6 U!	3.3 U!	6.6 U!	3.3 U!	0.33 U!
LOCATION 17	54	P	S	J4610	840417	1532	0.36 U!	0.36 U!	0.36 U!	0.71 U!	0.36 U!	0.71 U!	0.36 U!	0.36 U!
LOCATION 18	50	P	S	J4609	840417	1520	0.23 U!	0.23 U!	0.23 U!	0.46 U!	0.23 U!	0.46 U!	0.23 U!	0.23 U!
LOCATION 19	45	P	S	J4608	840417	1505	0.24 U!	0.24 U!	0.24 U!	0.48 U!	0.24 U!	0.48 U!	0.24 U!	0.24 U!
LOCATION 20	3	P	S	J4617	840418	1011	5.4 M!	0.26 U!	0.26 U!	0.5 U!	5.4 U!	0.5 U!	5.4 U!	0.26 U!
LOCATION 21	35	P	S	J4618	840418	1029	3.7 M!	0.17 U!	0.17 U!	0.35 U!	3.7 U!	0.35 U!	3.7 U!	0.17 U!
LOCATION 22	38	P	S	J4619	840418	1040	3.6 U!	0.17 U!	0.17 U!	0.34 U!	3.6 U!	0.34 U!	3.6 U!	0.17 U!
LOCATION 23	45	S	S	J4630	840418	1230	2.395U!	2.395U!	23.950U!	4.790U!	2.395U!	4.790U!	2.395U!	2.395U!
LOCATION 24	33	M	S	J4631	840418	1247	4.8 U!	4.8 U!	4.8 U!	4.8 U!	4.8 U!	4.8 U!	4.8 U!	4.8 U!
LOCATION 25	25	S	S	J4623	840417	1210	1.800U!	1.800U!	18.000U!	3.600U!	1.800U!	3.600U!	1.800U!	1.800U!
LOCATION 26	35	S	S	J4627	840418	1051	1.260U!	1.260U!	12.600U!	2.520U!	1.260U!	2.520U!	1.260U!	1.260U!
LOCATION 27	30	S	S	J4628	840418	1107	3.680U!	3.680U!	36.800U!	7.360U!	3.680U!	7.360U!	3.680U!	3.680U!
LOCATION 28	34	S	S	J4629	840418	1116	2.860U!	2.860U!	28.600U!	5.720U!	2.860U!	5.720U!	2.860U!	2.860U!
LOCATION 29	35	M	S	J4632	840418	1305	4.8 U!	4.8 U!	4.8 U!	4.8 U!	4.8 U!	4.8 U!	4.8 U!	4.8 U!
LOCATION 30	40	M	S	J4633	840418	1320	8 U!	8 U!	8 U!	8 U!	8 U!	8 U!	8 U!	8 U!
LOCATION 31	35	M	S	J4634	840418	1341	7.2 U!	7.2 U!	7.2 U!	7.2 U!	7.2 U!	7.2 U!	7.2 U!	7.2 U!
LOCATION 32	0	S	S	J4624	840417	1415	1.725U!	1.725U!	17.250U!	3.450U!	1.725U!	3.450U!	1.725U!	1.725U!
LOCATION 33	40	M	S	J4637	840418	1439	8 U!	8 U!	8 U!	8 U!	8 U!	8 U!	8 U!	8 U!
LOCATION 34	0	S	S	J4625	840417	1240	1.860U!	1.860U!	18.600U!	3.720U!	1.860U!	3.720U!	1.860U!	1.860U!
LOCATION 36	40	I	S	J4641	840419	1014	44 U!	44 U!	444 U!	44 U!	44 U!	44 U!	44 U!	44 U!
LOCATION 37	10	M	S	J4640	840419	1008	8 U!	8 U!	8 U!	8 U!	32 M!	8 U!	8 U!	8 U!
LOCATION 38	24	I	S	J4643	840419	1043	31 U!	31 U!	313 U!	31 U!	31 U!	31 U!	31 U!	31 U!
LOCATION 39	40	I	S	J4642	840419	1026	49 U!	49 U!	488 U!	49 U!	49 U!	49 U!	49 U!	49 U!
LOCATION 40	4	I	S	J4644	840419	1052	38 U!	38 U!	385 U!	38 U!	38 U!	38 U!	38 U!	38 U!
LOCATION 41	0	S	S	J4626	840417	1320	1.750U!	1.750U!	17.500U!	3.500U!	1.750U!	3.500U!	1.750U!	1.750U!
LOCATION 42	10	I	S	J4645	840419	1102	29 U!	29 U!	290 U!	29 U!	29 U!	29 U!	29 U!	29 U!
LOCATION 43	33	I	S	J4646	840419	1109	43 U!	43 U!	425 U!	43 U!	43 U!	43 U!	43 U!	43 U!
LOCATION 44	29	I	S	J4649	840419	1221	40 U!	40 U!	400 U!	40 U!	40 U!	40 U!	40 U!	40 U!

ORGANIC ANALYSES
851107

EAGLE HARBOR SURVEY
4/17-18/84 SEDIMENTS / TISSUE
5/07/84 SEDIMENTS

VALUE CODES: UNITS: UG/KG (PPB) DRY WEIGHT
U - NOT DETECTED, VALUE SHOWN IS MINIMUM QUANTIFIABLE LIMIT
M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
K - MULTIPLY VALUE SHOWN BY 1,000
ANALYSIS CODES: (INDICATE LAB PERFORMING ANALYSIS)
P-PEDCO, S-S CUBED, M-MEAD COMPU CHEM, W-WEST COAST TECHNICAL
DEPTH IS IN FEET

							PESTICIDES							
STATION DESCRIPTION	DEPTH	ANALYSIS	M	OTR NUM	DATE	TIME	ALDRIN	DIELDRIN	CHLORDANE	4,4'-DDT	4,4'-DDE	4,4'-DDD	A-ENDOSULFAN	B-ENDOSULFAN
LOCATION 45	6	I	S	J4648	840419	1214	29 U!	29 U!	286 U!	29 U!	29 U!	29 U!	29 U!	29 U!
LOCATION 46	4	I	S	J4647	840419	1210	29 U!	29 U!	294 U!	29 U!	29 U!	29 U!	29 U!	29 U!
LOCATION 48	35	M	S	J4636	840418	1417	7.2 U!	7.2 U!	7.2 U!	7.2 U!	7.2 U!	7.2 U!	7.2 U!	7.2 U!
LOCATION 49	35	M	S	J4639	840419	0956	8 U!	8 U!	8 U!	8 U!	8 U!	8 U!	8 U!	8 U!
LOCATION 50	32	M	S	J4635	840418	1406	7.2 U!	7.2 U!	7.2 U!	7.2 U!	7.2 U!	7.2 U!	7.2 U!	7.2 U!
LOCATION 51	45	I	S	J4650	840419	1252	1250 U!	1250 U!	12500 U!	1250 U!	1250 U!	1250 U!	1250 U!	1250 U!

ORGANIC ANALYSES
851107

EAGLE HARBOR SURVEY
4/17-18/84 SEDIMENTS / TISSUE
5/07/84 SEDIMENTS

VALUE CODES: UNITS: UG/KG (PPB) DRY WEIGHT
U - NOT DETECTED, VALUE SHOWN IS MINIMUM QUANTIFIABLE LIMIT
M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
K - MULTIPLY VALUE SHOWN BY 1,000
ANALYSIS CODES: (INDICATE LAB PERFORMING ANALYSIS)
P-PEDCO, S-S CUBED, M-MEAD COMPU CHEM, W-WEST COAST TECHNICAL
DEPTH IS IN FEET

							PESTICIDES								
STATION DESCRIPTION	DEP TH	ANALY SIS	M	OTR NUM	DATE	TIME	ENDO SULFAN SULFATE	ENDRIN	ENDRIN ALDEHYDE	HEPTA CHLOR	HEPTA CHLOR EPOXIDE	A-BHC	B-BHC	D-BHC	G-BHC LINDANE
LOCATION 1	5	P	S	J4601	840417	1215	0.83 U!	0.42 U!	0.83 U!	0.42 U!	0.42 U!	0.42 U!	0.42 U!	0.42 U!	0.42 U!
LOCATION 1A	0	M	S	J4638	840418	1240	5.6 U!	5.6 U!	5.6 U!	5.6 U!	5.6 U!	5.6 U!	5.6 U!	5.6 U!	5.6 U!
LOCATION 2	5	P	S	J4613	840418	0930	0.95 U!	0.48 U!	0.95 U!	0.48 U!	0.48 U!	0.48 U!	0.48 U!	0.48 U!	0.48 U!
LOCATION 3	5	P	S	J4602	840417	1233	182 U!	91 U!	182 U!	91 U!	91 U!	91 U!	91 U!	91 U!	91 U!
LOCATION 4	04	P	S	J4614	840418	0942	0.66 U!	0.33 U!	0.66 U!	0.33 U!	0.33 U!	0.33 U!	0.33 U!	0.33 U!	0.33 U!
LOCATION 5	5	P	S	J4603	840417	1254	190 U!	95 U!	190 U!	95 U!	95 U!	95 U!	95 U!	95 U!	95 U!
LOCATION 6	60	P	S	J4604	840417	1303	0.84 U!	0.42 U!	0.84 U!	0.42 U!	0.42 U!	0.42 U!	0.42 U!	0.42 U!	0.42 U!
LOCATION 7	0	P	S	J4620	840417	1015	0.95 U!	0.48 U!	0.95 U!	10 U!	10 U!	10 U!	10 U!	10 U!	10 U!
LOCATION 8	5	P	S	J4615	840418	0953	1 U!	0.5 U!	1 U!	0.5 U!	0.5 U!	0.5 U!	0.5 U!	0.5 U!	0.5 U!
LOCATION 9	2	P	S	J4605	840417	1312	1.0 U!	0.53 U!	1 U!	0.53 U!	0.53 U!	0.53 U!	0.53 U!	0.53 U!	0.53 U!
LOCATION 10	35	P	S	J4606	840417	1327	0.74 U!	0.37 U!	0.74 U!	0.37 U!	0.37 U!	0.37 U!	0.37 U!	0.37 U!	0.37 U!
LOCATION 11	0	S	S	J4621	840417	1045	3.180U!	1.590U!	3.180U!	1.590U!	1.590U!	1.590U!	1.590U!	1.590U!	1.590U!
LOCATION 12	40	P	S	J4607	840417	1336	1.3 U!	0.66 U!	1.3 U!	0.66 U!	0.66 U!	0.66 U!	0.66 U!	0.66 U!	0.66 U!
LOCATION 13	0	S	S	J4622	840417	1145	4.260U!	2.130U!	4.260U!	2.130U!	2.130U!	2.130U!	2.130U!	2.130U!	2.130U!
LOCATION 14	3	P	S	J4616	840418	1001	0.90 U!	0.45 U!	0.90 U!	0.45 U!	0.45 U!	0.45 U!	0.45 U!	0.45 U!	0.45 U!
LOCATION 15	12	P	S	J4612	840417	1607	0.71 U!	0.36 U!	0.71 U!	0.36 U!	0.36 U!	0.36 U!	0.36 U!	0.36 U!	0.36 U!
LOCATION 16	35	P	S	J4611	840417	1558	0.66 U!	0.33 U!	0.66 U!	3.3 U!	3.3 U!	3.3 U!	3.3 U!	3.3 U!	3.3 U!
LOCATION 17	54	P	S	J4610	840417	1532	0.71 U!	0.36 U!	0.71 U!	0.36 U!	0.36 U!	0.36 U!	0.36 U!	0.36 U!	0.36 U!
LOCATION 18	50	P	S	J4609	840417	1520	0.46 U!	0.23 U!	0.46 U!	0.23 U!	0.23 U!	0.23 U!	0.23 U!	0.23 U!	0.23 U!
LOCATION 19	45	P	S	J4608	840417	1505	0.48 U!	0.24 U!	0.48 U!	0.24 U!	0.24 U!	0.24 U!	0.24 U!	0.24 U!	0.24 U!
LOCATION 20	3	P	S	J4617	840418	1011	0.5 U!	0.26 U!	0.5 U!	5.4 U!	5.4 U!	5.4 U!	5.4 U!	5.4 U!	5.4 U!
LOCATION 21	35	P	S	J4618	840418	1029	0.35 U!	0.17 U!	0.35 U!	3.7 U!	3.7 U!	3.7 U!	3.7 U!	3.7 U!	3.7 U!
LOCATION 22	38	P	S	J4619	840418	1040	0.34 U!	0.17 U!	0.34 U!	3.6 U!	3.6 U!	3.6 U!	3.6 U!	3.6 U!	3.6 U!
LOCATION 23	45	S	S	J4630	840418	1230	4.790U!	2.395U!	4.790U!	2.395U!	2.395U!	2.395U!	2.395U!	2.395U!	2.395U!
LOCATION 24	33	M	S	J4631	840418	1247	4.8 U!	4.8 U!	4.8 U!	4.8 U!	4.8 U!	4.8 U!	4.8 U!	4.8 U!	4.8 U!
LOCATION 25	25	S	S	J4623	840417	1210	3.600U!	1.800U!	3.600U!	1.800U!	1.800U!	1.800U!	1.800U!	1.800U!	1.800U!
LOCATION 26	35	S	S	J4627	840418	1051	2.520U!	1.260U!	2.520U!	1.260U!	1.260U!	1.260U!	1.260U!	1.260U!	1.260U!
LOCATION 27	30	S	S	J4628	840418	1107	7.360U!	3.680U!	7.360U!	3.680U!	3.680U!	3.680U!	3.680U!	3.680U!	3.680U!
LOCATION 28	34	S	S	J4629	840418	1116	5.720U!	2.860U!	5.720U!	2.860U!	2.860U!	2.860U!	2.860U!	2.860U!	2.860U!
LOCATION 29	35	M	S	J4632	840418	1305	4.8 U!	4.8 U!	4.8 U!	4.8 U!	4.8 U!	4.8 U!	4.8 U!	4.8 U!	4.8 U!
LOCATION 30	40	M	S	J4633	840418	1320	8 U!	8 U!	8 U!	8 U!	8 U!	8 U!	8 U!	8 U!	8 U!
LOCATION 31	35	M	S	J4634	840418	1341	7.2 U!	7.2 U!	7.2 U!	7.2 U!	7.2 U!	7.2 U!	7.2 U!	7.2 U!	7.2 U!
LOCATION 32	0	S	S	J4624	840417	1415	3.450U!	1.725U!	3.450U!	1.725U!	1.725U!	1.725U!	1.725U!	1.725U!	1.725U!
LOCATION 33	40	M	S	J4637	840418	1439	8 U!	8 U!	8 U!	8 U!	8 U!	8 U!	8 U!	8 U!	8 U!
LOCATION 34	0	S	S	J4625	840417	1240	3.720U!	1.860U!	3.720U!	1.860U!	1.860U!	1.860U!	1.860U!	1.860U!	1.860U!
LOCATION 36	40	I	S	J4641	840419	1014	44 U!	44 U!	44 U!	44 U!	44 U!	44 U!	44 U!	44 U!	44 U!
LOCATION 37	10	M	S	J4640	840419	1008	8 U!	8 U!	8 U!	8 U!	8 U!	8 U!	8 U!	8 U!	8 U!
LOCATION 38	24	I	S	J4643	840419	1043	31 U!	31 U!	31 U!	31 U!	31 U!	31 U!	31 U!	31 U!	31 U!
LOCATION 39	40	I	S	J4642	840419	1026	49 U!	49 U!	49 U!	49 U!	49 U!	49 U!	49 U!	49 U!	49 U!
LOCATION 40	4	I	S	J4644	840419	1052	38 U!	38 U!	38 U!	38 U!	38 U!	38 U!	38 U!	38 U!	38 U!
LOCATION 41	0	S	S	J4626	840417	1320	3.500U!	1.750U!	3.500U!	1.750U!	1.750U!	1.750U!	1.750U!	1.750U!	1.750U!
LOCATION 42	10	I	S	J4645	840419	1102	29 U!	29 U!	29 U!	29 U!	29 U!	29 U!	29 U!	29 U!	29 U!
LOCATION 43	33	I	S	J4646	840419	1109	43 U!	43 U!	43 U!	43 U!	43 U!	43 U!	43 U!	43 U!	43 U!
LOCATION 44	29	I	S	J4649	840419	1221	40 U!	40 U!	40 U!	40 U!	40 U!	40 U!	40 U!	40 U!	40 U!

ORGANIC ANALYSES
851107

EAGLE HARBOR SURVEY
4/17-18/84 SEDIMENTS / TISSUE
5/07/84 SEDIMENTS

VALUE CODES: UNITS: UG/KG (PPB) DRY WEIGHT
U - NOT DETECTED, VALUE SHOWN IS MINIMUM QUANTIFIABLE LIMIT
M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
K - MULTIPLY VALUE SHOWN BY 1,000
ANALYSIS CODES: (INDICATE LAB PERFORMING ANALYSIS)
P-PEDCO, S-S CUBED, M-MEAD COMPU CHEM, W-WEST COAST TECHNICAL
DEPTH IS IN FEET

							PESTICIDES								
STATION DESCRIPTION	DEPTH	ANALYSIS	M	OTR NUM	DATE	TIME	ENDO SULFAN SULFATE	ENDRIN	ENDRIN ALDEHYDE	HEPTA CHLOR	HEPTA CHLOR EPOXIDE	A-BHC	B-BHC	D-BHC	G-BHC LINDANE
LOCATION 45	6	I	S	J4648	840419	1214	29 U!	29 U!	29 U!	29 U!	29 U!	29 U!	29 U!	29 U!	29 U!
LOCATION 46	4	I	S	J4647	840419	1210	29 U!	29 U!	29 U!	29 U!	29 U!	29 U!	29 U!	29 U!	29 U!
LOCATION 48	35	M	S	J4636	840418	1417	7.2 U!	7.2 U!	7.2 U!	7.2 U!	7.2 U!	7.2 U!	7.2 U!	7.2 U!	7.2 U!
LOCATION 49	35	M	S	J4639	840419	0956	8 U!	8 U!	8 U!	8 U!	8 U!	8 U!	8 U!	8 U!	8 U!
LOCATION 50	32	M	S	J4635	840418	1406	7.2 U!	7.2 U!	7.2 U!	7.2 U!	7.2 U!	7.2 U!	7.2 U!	7.2 U!	7.2 U!
LOCATION 51	45	I	S	J4650	840419	1252	1250 U!	1250 U!	1250 U!	1250 U!	1250 U!	1250 U!	1250 U!	1250 U!	1250 U!

ORGANIC ANALYSES
851107

EAGLE HARBOR SURVEY
4/17-18/84 SEDIMENTS / TISSUE
5/07/84 SEDIMENTS

ANALYSES: SEDIMENT: * MEAD COMPU CHEM
TISSUE: WASHINGTON DEPT OF ECOLOGY - MANCHESTER
÷ APPLIES TO BASE/NEUTRALS & TENTATIVES
U NOT DETECTED -- VALUE SHOWN IS MINIMUM DETECTION LIMIT
M COMPOUND PRESENT BUT BELOW MINIMUM DETECTION LIMIT SHOWN
UNITS: UG/KG (PPB) DRY WEIGHT BASIS

STATION DESCRIPTION	DEPTH	ANALYSIS	M	LAB NUM	DATE	TIME	PCB PCB-1242	PCB PCB-1254	PCB PCB-1221	PCB PCB-1232	PCB PCB-1248	PCB PCB-1260	PCB PCB-1016	TOXA-PHENE	TCDD DIOXIN
LOCATION 1	5	P	S	J4601	840417	1215	0.42 U	8.3 U	8.3 U	4.2 U	8.3 U	8.3 U	16.6 U	4.2 U	
LOCATION 1A	0	M	S	J4638	840418	1240	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	.23 U
LOCATION 2	5	P	S	J4613	840418	0930	4.8 U	9.5 U	9.5 U	4.8 U	9.5 U	9.5 U	19 U	4.8 U	
LOCATION 3	5	P	S	J4602	840417	1233	91 U	182 U	182 U	9.1 U	182 U	182 U	364 U	9.1 U	
LOCATION 4	04	P	S	J4614	840418	0942	3.3 U	6.6 U	6.6 U	3.3 U	6.6 U	6.6 U	13.3 U	3.3 U	
LOCATION 5	5	P	S	J4603	840417	1254	95 U	1904 U	1904 U	950 U	1904 U	1904 U	3809	950 U	
LOCATION 6	60	P	S	J4604	840417	1303	0.42 U	8.4 U	8.4 U	4.2 U	8.4 U	8.4 U	16.8 U	4.2 U	
LOCATION 7	0	P	S	J4620	840417	1015	100 U	9.5 U	200 U	100 U	200 U	9.5 U	400 U	100 U	
LOCATION 8	5	P	S	J4615	840418	0953	5 U	10 U	10 U	5 U	10 U	10 U	20 U	5 U	
LOCATION 9	2	P	S	J4605	840417	1312	0.53 U	10 U	10 U	5 U	10 U	10 U	21 U	5 U	
LOCATION 10	35	P	S	J4606	840417	1327	0.37 U	7.4 U	7.4 U	3.7 U	7.4 U	7.4 U	14.8 U	3.7 U	
LOCATION 11	0	S	S	J4621	840417	1045	15.900 U	31.800 U	31.800 U	31.800 U	31.800 U	63.600 U	15.900 U	15.900 U	1.935 U
LOCATION 12	40	P	S	J4607	840417	1336	0.66 U	13 U	13 U	6.6 U	13 U	13 U	27 U	6.6 U	
LOCATION 13	0	S	S	J4622	840417	1145	21.300 U	42.600 U	42.600 U	42.600 U	42.600 U	85.200 U	21.300 U	21.300 U	2.585 U
LOCATION 14	3	P	S	J4616	840418	1001	4.5 U	9.0 U	9.0 U	4.5 U	9 U	9 U	18 U	4.5 U	
LOCATION 15	12	P	S	J4612	840417	1607	0.36 U	7.1 U	7.1 U	3.6 U	7.1 U	7.1 U	14.2 U	3.6 U	
LOCATION 16	35	P	S	J4611	840417	1558	33 U	66.6 U	66.6 U	33 U	66.6 U	66.6 U	133.3 U	33 U	
LOCATION 17	54	P	S	J4610	840417	1532	0.36 U	3.6 U	7.1 U	3.6 U	7.1 U	7.1 U	14.2 U	3.6 U	
LOCATION 18	50	P	S	J4609	840417	1520	0.23 U	2.3 U	4.6 U	2.3 U	4.6 U	4.6 U	9.3 U	2.3 U	
LOCATION 19	45	P	S	J4608	840417	1505	0.24 U	602 U	4.8 U	2.4 U	4.8 U	4.8 U	9.7 U	2.4 U	
LOCATION 20	3	P	S	J4617	840418	1011	54 U	5 U	108 U	54 U	108 U	5 U	215 U	54 U	
LOCATION 21	35	P	S	J4618	840418	1029	37 U	3.7 U	74 U	37 U	74 U	3.7 U	147 U	37 U	
LOCATION 22	38	P	S	J4619	840418	1040	36 U	3.6 U	72 U	36 U	72 U	3.6 U	145 U	36 U	
LOCATION 23	45	S	S	J4630	840418	1230	23.950 U	47.900 U	47.900 U	47.900 U	47.900 U	95.800 U	23.950 U	23.950 U	2.920 U
LOCATION 24	33	M	S	J4631	840418	1247	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	.16 U
LOCATION 25	25	S	S	J4623	840417	1210	18.000 U	36.000 U	36.000 U	36.000 U	36.000 U	72.000 U	18.000 U	18.000 U	2.170 U
LOCATION 26	35	S	S	J4627	840418	1051	12.600 U	25.200 U	25.200 U	25.200 U	25.200 U	50.400 U	12.600 U	12.600 U	4.200 U
LOCATION 27	30	S	S	J4628	840418	1107	36.800 U	73.600 U	73.600 U	73.600 U	73.600 U	147.200 U	36.800 U	36.800 U	4.460 U
LOCATION 28	34	S	S	J4629	840418	1116	28.600 U	57.200 U	57.200 U	57.200 U	57.200 U	114.400 U	28.600 U	28.600 U	3.840 U
LOCATION 29	35	M	S	J4632	840418	1305	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	.16 U
LOCATION 30	40	M	S	J4633	840418	1320	8 U	8 U	8 U	8 U	8 U	8 U	8 U	8 U	.35 U
LOCATION 31	35	M	S	J4634	840418	1341	7.2 U	7.2 U	7.2 U	7.2 U	7.2 U	7.2 U	7.2 U	7.2 U	.31 U
LOCATION 32	0	S	S	J4624	840417	1415	17.250 U	34.500 U	34.500 U	34.500 U	34.500 U	69.000 U	17.250 U	17.250 U	2.125 U
LOCATION 33	40	M	S	J4637	840418	1439	8 U	8 U	8 U	8 U	8 U	8 U	8 U	8 U	.31 U
LOCATION 34	0	S	S	J4625	840417	1240	18.600 U	37.200 U	37.200 U	37.200 U	37.200 U	74.400 U	18.600 U	18.600 U	2.310 U
LOCATION 36	40	I	S	J4641	840419	1014	444 U	444 U	444 U	444 U	444 U	444 U	444 U	444 U	4.4 U
LOCATION 37	10	M	S	J4640	840419	1008	8 U	8 U	8 U	8 U	8 U	8 U	8 U	8 U	.31 U
LOCATION 38	24	I	S	J4643	840419	1043	313 U	313 U	313 U	313 U	313 U	313 U	313 U	313 U	3.1 U
LOCATION 39	40	I	S	J4642	840419	1026	488 U	488 U	488 U	488 U	488 U	488 U	488 U	488 U	4.9 U
LOCATION 40	4	I	S	J4644	840419	1052	385 U	385 U	385 U	385 U	385 U	385 U	385 U	385 U	3.8 U
LOCATION 41	0	S	S	J4626	840417	1320	17.500 U	35.000 U	35.000 U	35.000 U	35.000 U	70.000 U	17.500 U	17.500 U	2.135 U
LOCATION 42	10	I	S	J4645	840419	1102	290 U	290 U	290 U	290 U	290 U	290 U	290 U	290 U	2.9 U
LOCATION 43	33	I	S	J4646	840419	1109	425 U	425 U	425 U	425 U	425 U	425 U	425 U	425 U	4.3 U
LOCATION 44	29	I	S	J4649	840419	1221	400 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	4.0 U
LOCATION 45	6	I	S	J4648	840419	1214	286 U	286 U	286 U	286 U	286 U	286 U	286 U	286 U	2.9 U

ORGANIC ANALYSES
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EAGLE HARBOR SURVEY
4/17-18/84 SEDIMENTS / TISSUE
5/07/84 SEDIMENTS

ANALYSES: SEDIMENT: * MEAD COMPU CHEM
TISSUE: WASHINGTON DEPT OF ECOLOGY - MANCHESTER
+ APPLIES TO BASE/NEUTRALS & TENTATIVES
U NOT DETECTED -- VALUE SHOWN IS MINIMUM DETECTION LIMIT
M COMPOUND PRESENT BUT BELOW MINIMUM DETECTION LIMIT SHOWN
UNITS: UG/KG (PPB) DRY WEIGHT BASIS

STATION DESCRIPTION	DEP TH	ANALY SIS	M	LAB NUM	DATE	TIME	PCB PCB-1242	PCB-1254	PCB-1221	PCB-1232	PCB-1248	PCB-1260	PCB-1016	TOXA- PHENE	TCDD DIOXIN
LOCATION 46	4	I	S	J4647	840419	1210	294 U!	294 U!	294 U!	294 U!	294 U!	294 U!	294 U!	294 U!	2.9 U!
LOCATION 48	35	M	S	J4636	840418	1417	7.2 U!	7.2 U!	7.2 U!	7.2 U!	7.2 U!	7.2 U!	7.2 U!	7.2 U!	.29 U!
LOCATION 49	35	M	S	J4639	840419	0956	8 U!	8 U!	8 U!	8 U!	8 U!	8 U!	8 U!	8 U!	.32 U!
LOCATION 50	32	M	S	J4635	840418	1406	7.2 U!	7.2 U!	7.2 U!	7.2 U!	7.2 U!	7.2 U!	7.2 U!	7.2 U!	.29 U!
LOCATION 51	45	I	S	J4650	840419	1252	12500 U!	12500 U!	12500 U!	12500 U!	12500 U!	12500 U!	12500 U!	12500 U!	100 U!

ORGANIC ANALYSES
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EAGLE HARBOR SURVEY
4/17-18/84 SEDIMENTS / TISSUE
5/07/84 SEDIMENTS

VALUE CODES: UNITS ARE UG/KG (PPB) DRY WEIGHT
U - NOT DETECTED, VALUE SHOWN IS MINIMUM DETECTION LIMIT
M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
K - MULTIPLY VALUE SHOWN BY 1,000
ANALYSIS CODES:
P - PEDCO, S - S CUBED, M- MEAD COMPU CHEM, W - WEST COAST TEC
DEPTH IS IN FEET

							B A S E / N E U T R A L S								
STATION DESCRIPTION	DEPTH	ANALYSIS	M	OTR NUM	DATE	TIME	ACENAPHTHENE	BENZIDINE	1,2,4-TRICHLOR BENZENE	HEXA CHLORO BENZENE	HEXA CHLORO ETHANE	BIS 2-CHLORO EHTYL) ETHER	2-CHLORO NAPHTHALENE	1,2-DI CHLORO BENZENE	1,3-DI CHLORO BENZENE
LOCATION 1	5	P	S	J4601	840417	1215	833 U!	3333 U!	833 U!	833 U!	833 U!	833 U!	833 U!	833 U!	833 U!
LOCATION 1A	0	M	S	J4638	840418	1240	570 U!	2280 U!	570 U!	570 U!	570 U!	570 U!	570 U!	570 U!	570 U!
LOCATION 2	5	P	S	J4613	840418	0930	952 U!	3809 U!	952 U!	952 U!	952 U!	952 U!	952 U!	952 U!	952 U!
LOCATION 3	5	P	S	J4602	840417	1233	714 U!	2857 U!	714 U!	714 U!	714 U!	714 U!	714 U!	714 U!	714 U!
LOCATION 4	04	P	S	J4614	840418	0942	666 U!	2667 U!	666 U!	666 U!	666 U!	666 U!	666 U!	666 U!	666 U!
LOCATION 5	5	P	S	J4603	840417	1254	952 U!	3809 U!	952 U!	952 U!	952 U!	952 U!	952 U!	952 U!	952 U!
LOCATION 6	60	P	S	J4604	840417	1303	833 U!	3333 U!	833 U!	833 U!	833 U!	833 U!	833 U!	833 U!	833 U!
LOCATION 7	0	P	S	J4620	840417	1015	952 U!	3809 U!	952 U!	952 U!	952 U!	952 U!	952 U!	952 U!	952 U!
LOCATION 8	5	P	S	J4615	840418	0953	1000 U!	4000 U!	1000 U!	1000 U!	1000 U!	1000 U!	1000 U!	1000 U!	1000 U!
LOCATION 9	2	P	S	J4605	840417	1312	1053 U!	4210 U!	1053 U!	1053 U!	1053 U!	1053 U!	1053 U!	1053 U!	1053 U!
LOCATION 10	35	P	S	J4606	840417	1327	741 U!	2963 U!	741 U!	741 U!	741 U!	741 U!	741 U!	741 U!	741 U!
LOCATION 11	0	S	S	J4621	840417	1045	254 U!	1018 U!	254 U!	254 U!	254 U!	254 U!	254 U!	254 U!	254 U!
LOCATION 12	40	P	S	J4607	840417	1336	1333 U!	5333 U!	1333 U!	1333 U!	1333 U!	1333 U!	1333 U!	1333 U!	1333 U!
LOCATION 13	0	S	S	J4622	840417	1145	359 M!	1437 U!	359 U!	359 U!	359 U!	359 U!	359 U!	359 U!	359 U!
LOCATION 14	3	P	S	J4616	840418	1001	11227 !	3636 U!	909 U!	1705 M!	909 U!	909 U!	909 U!	909 U!	909 U!
LOCATION 15	12	P	S	J4612	840417	1607	714 U!	2857 U!	714 U!	714 U!	714 U!	714 U!	714 U!	714 U!	714 U!
LOCATION 16	35	P	S	J4611	840417	1558	666 U!	2667 U!	666 U!	666 U!	666 U!	666 U!	666 U!	666 U!	666 U!
LOCATION 17	54	P	S	J4610	840417	1532	714 U!	2857 U!	714 U!	714 U!	714 U!	714 U!	714 U!	714 U!	714 U!
LOCATION 18	50	P	S	J4609	840417	1520	465 U!	1860 U!	465 U!	465 U!	465 U!	465 U!	465 U!	465 U!	465 U!
LOCATION 19	45	P	S	J4608	840417	1505	488 U!	1951 U!	488 U!	488 U!	488 U!	488 U!	488 U!	488 U!	488 U!
LOCATION 20	3	P	S	J4617	840418	1011	513 U!	2051 U!	513 U!	513 U!	513 U!	513 U!	513 U!	513 U!	513 U!
LOCATION 21	35	P	S	J4618	840418	1029	351 U!	1403 U!	351 U!	351 U!	351 U!	351 U!	351 U!	351 U!	351 U!
LOCATION 22	38	P	S	J4619	840418	1040	345 U!	1379 U!	345 U!	345 U!	345 U!	345 U!	345 U!	345 U!	345 U!
LOCATION 23	45	S	S	J4630	840418	1230	446 M!	1400 U!	350 U!	350 U!	350 U!	350 U!	350 U!	350 U!	350 U!
LOCATION 24	33	M	S	J4631	840418	1247	470 U!	1880 U!	470 U!	470 U!	470 U!	470 U!	470 U!	470 U!	470 U!
LOCATION 25	25	S	S	J4623	840417	1210	355 U!	1420 U!	355 U!	355 U!	355 U!	355 U!	355 U!	355 U!	355 U!
LOCATION 26	35	S	S	J4627	840418	1051	11.6KM!	46.6KU!	11.6KU!	11.6KU!	11.6KU!	11.6KU!	11.6KU!	11.6KU!	11.6KU!
LOCATION 27	30	S	S	J4628	840418	1107	756 M!	3027 U!	756 U!	756 U!	756 U!	756 U!	756 U!	756 U!	756 U!
LOCATION 28	34	S	S	J4629	840418	1116	83.6 K!	32.1KU!	8.1KU!	8.1KU!	8.1KU!	8.1KU!	8.1KU!	8.1KU!	8.1KU!
LOCATION 29	35	M	S	J4632	840418	1305	460 U!	1840 U!	460 U!	460 U!	460 U!	460 U!	460 U!	460 U!	460 U!
LOCATION 30	40	M	S	J4633	840418	1320	860 U!	3440 U!	860 U!	860 U!	860 U!	860 U!	860 U!	860 U!	860 U!
LOCATION 31	35	M	S	J4634	840418	1341	700 U!	2800 U!	700 U!	700 U!	700 U!	700 U!	700 U!	700 U!	700 U!
LOCATION 32	0	S	S	J4624	840417	1415	269 U!	1077 U!	269 U!	269 U!	269 U!	269 U!	269 U!	269 U!	269 U!
LOCATION 33	40	M	S	J4637	840418	1439	776 U!	3104 U!	776 U!	776 U!	776 U!	776 U!	776 U!	776 U!	776 U!
LOCATION 34	0	S	S	J4625	840417	1240	322 M!	1287 U!	322 U!	322 U!	322 U!	322 U!	322 U!	322 U!	322 U!
LOCATION 36	40	I	S	J4641	840419	1014	444 U!	444 U!	444 U!	444 U!	444 U!	444 U!	444 U!	444 U!	444 U!
LOCATION 37	10	M	S	J4640	840419	1008	772 U!	3088 U!	772 U!	772 U!	772 U!	772 U!	772 U!	772 U!	772 U!
LOCATION 38	24	I	S	J4643	840419	1043	313 U!	313 U!	313 U!	313 U!	313 U!	313 U!	313 U!	313 U!	313 U!
LOCATION 39	40	I	S	J4642	840419	1026	488 U!	488 U!	488 U!	488 U!	488 U!	488 U!	488 U!	488 U!	488 U!
LOCATION 40	4	I	S	J4644	840419	1052	385 U!	385 U!	385 U!	385 U!	385 U!	385 U!	385 U!	385 U!	385 U!
LOCATION 41	0	S	S	J4626	840417	1320	230 U!	922 U!	230 U!	230 U!	230 U!	230 U!	230 U!	230 U!	230 U!
LOCATION 42	10	I	S	J4645	840419	1102	290 U!	290 U!	290 U!	290 U!	290 U!	290 U!	290 U!	290 U!	290 U!
LOCATION 43	33	I	S	J4646	840419	1109	425 U!	425 U!	425 U!	425 U!	425 U!	425 U!	425 U!	425 U!	425 U!
LOCATION 44	29	I	S	J4649	840419	1221	400 U!	400 U!	400 U!	400 U!	400 U!	400 U!	400 U!	400 U!	400 U!

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ORGANIC ANALYSES
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                                                                   VALUE CODES:                 UNITS ARE UG/KG (PPB) DRY WEIGHT
                                                                     U - NOT DETECTED, VALUE SHOWN IS MINIMUM DETECTION LIMIT
                   EAGLE HARBOR SURVEY                               M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
           4/17-18/84   SEDIMENTS / TISSUE                           K - MULTIPLY VALUE SHOWN BY 1,000
              5/07/84      SEDIMENTS                               ANALYSIS CODES:
                                                                     P - PEDCO, S - S CUBED, M- MEAD COMPU CHEM, W - WEST COAST TEC
                                                                   DEPTH IS IN FEET
                                                      ------------------------ B A S E / N E U T R A L S ------------------------
                                                                                                 BIS
                                                                          1,2,4-   HEXA     HEXA     2-CHLORO 2-CHLORO 1,2-DI   1,3-DI
                         DEP ANALY   OTR                  ACENAPH BEN      TRICHLOR CHLORO   CHLORO   EHTYL)   NAPH     CHLORO   CHLORO
STATION DESCRIPTION       TH  SIS  M NUM     DATE  TIME THENE   ZIDINE   BENZENE  BENZENE  ETHANE   ETHER    THALENE  BENZENE  BENZENE
------------------------ --- ----- - ------ ------ ---- -------- -------- -------- -------- -------- -------- -------- -------- --------
LOCATION 45                6   I   S J4648 840419 1214   286   U! 286   U! 286   U! 286   U! 286   U! 286   U! 286   U! 286   U! 286   U!
LOCATION 46                4   I   S J4647 840419 1210   294   U! 294   U! 294   U! 294   U! 294   U! 294   U! 294   U! 294   U! 294   U!
LOCATION 48               35   M   S J4636 840418 1417   725   U!2900   U! 725   U! 725   U! 725   U! 725   U! 725   U! 725   U! 725   U!
LOCATION 49               35   M   S J4639 840419 0956   720   U!2880   U! 720   U! 720   U! 720   U! 720   U! 720   U! 720   U! 720   U!
LOCATION 50               32   M   S J4635 840418 1406   710   U!2840   U! 710   U! 710   U! 710   U! 710   U! 710   U! 710   U! 710   U!
LOCATION 51               45   I   S J4650 840419 1252 13250   M!12500  U!12500  U!12500  U!12500  U!12500  U!12500  U!12500  U!12500  U!
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ORGANIC ANALYSES
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                                                        VALUE CODES:                 UNITS ARE UG/KG (PPB) DRY WEIGHT
                  EAGLE HARBOR SURVEY                     U - NOT DETECTED, VALUE SHOWN IS MINIMUM DETECTION LIMIT
          4/17-18/84   SEDIMENTS / TISSUE                 M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
             5/07/84      SEDIMENTS                       K - MULTIPLY VALUE SHOWN BY 1,000
                                                        ANALYSIS CODES:
                                                          P - PEDCO, S - S CUBED, M- MEAD COMPU CHEM, W - WEST COAST TEC
                                                        DEPTH IS IN FEET

                                                   ---------------------- B A S E / N E U T R A L S ---------------------
                                                             3,3'-
                                                   1,4-DI    DICHLORO 2,4-     2,6-     1,2-DI            4-CHLORO 4-BROMO  BIS(2-
                                 DEP ANALY   OTR           CHLORO    BENZI    DINITRO  DINITRO  PHENYLHY FLUOR    PHENYL   PHENYL   CHLOROISO
STATION DESCRIPTION               TH  SIS  M NUM    DATE  TIME BENZENE DINE     TOLUENE  TOLUENE  DRAZAINE ANTHENE  PHENYL   PHENYL   PROPYL)
                                                                                                                   ETHER    ETHER    ETHER
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LOCATION 1                         5   P   S J4601  840417 1215   833    U!4208    !1667   U!1667   U!1667   U! 833  U!2867   M! 833   U!1667   U!
LOCATION 1A                        0   M   S J4638  840418 1240   570    U!1140   U!1140   U!1140   U!1140   U! 570  M! 570   U! 570   U!1140   U!
LOCATION 2                         5   P   S J4613  840418 0930   952    U!1905   U!1905   U!1905   U!1905   U! 952  U! 952   U! 952   U!1905   U!
LOCATION 3                         5   P   S J4602  840417 1233   714    U!3607   M!1429   U!1429   U!1429   U! 714  U!2457   M! 714   U!1429   U!
LOCATION 4                        04   P   S J4614  840418 0942   666    U!1333   U!1333   U!1333   U!1333   U! 666  U! 666   U! 666   U!1333    !
LOCATION 5                         5   P   S J4603  840417 1254   952    U!1905   U!1905   U!1905   U!1905   U! 952  U! 952   U! 952   U!1905   U!
LOCATION 6                        60   P   S J4604  840417 1303   833    U!1667   U!1667   U!1667   U!1667   U! 833  U! 833   U! 833   U!1667   U!
LOCATION 7                         0   P   S J4620  840417 1015   952    U!1905   U!1905   U!1905   U!1905   U! 952  U! 952   U! 952   U!1905   U!
LOCATION 8                         5   P   S J4615  840418 0953  1000    U!2000   U!2000   U!2000   U!2000   U!1000  U!1000   U!1000   U!2000   U!
LOCATION 9                         2   P   S J4605  840417 1312  1053    U!2105   U!2105   U!2105   U!2105   U!1053  U!1053   U!1053   U!2105   U!
LOCATION 10                       35   P   S J4606  840417 1327   741    U!9333    !1481   U!1481   U!1481   U!1678  M!11407   ! 741   U!1481   U!
LOCATION 11                        0   S   S J4621  840417 1045   254    U! 508   U! 508   U! 508   U! 508   U! 254  U! 254   U! 254   U! 508   U!
LOCATION 12                       40   P   S J4607  840417 1336  1333    U!6733   M!2667   U!2667   U!2667   U!1333  U!4587   M!1333   U!2667   U!
LOCATION 13                        0   S   S J4622  840417 1145   359    U! 718   U! 718   U! 718   U! 718   U! 565  M! 359   U! 359   U! 718   U!
LOCATION 14                        3   P   S J4616  840418 1001   909    U!1818   U!11864   !1818   U!1818   U!2373  M! 909   U! 909   U!1818   U!
LOCATION 15                       12   P   S J4612  840417 1607   714    U!2564    !1428   U!1428   U!1428   U!6143   ! 714   U! 714   U!1428   U!
LOCATION 16                       35   P   S J4611  840417 1558   666    U!1333   U!1333   U!1333   U!1333   U! 666  U! 666   U! 666   U!1333   U!
LOCATION 17                       54   P   S J4610  840417 1532   714    U!1429   U!1429   U!1429   U!1429   U! 714  U! 714   U! 714   U!1429   U!
LOCATION 18                       50   P   S J4609  840417 1520   465    U!1126   M! 930   U! 930   U! 930   U!1830  M! 465   U! 465   U! 930   U!
LOCATION 19                       45   P   S J4608  840417 1505   488    U! 976   U! 976   U! 976   U! 976   U! 948  M! 488   U! 488   U! 976   U!
LOCATION 20                        3   P   S J4617  840418 1011   513    U!1923   M!1026   U!1026   U!1026   U!13795  ! 513   U! 513   U!1026   U!
LOCATION 21                       35   P   S J4618  840418 1029   351    U! 702   U! 702   U! 702   U! 702   U! 351  U! 351   U! 351   U! 702   U!
LOCATION 22                       38  .P   S J4619  840418 1040   345    U!1897    ! 690   U! 690   U! 690   U!1897   ! 345   U! 345   U! 690   U!
LOCATION 23                       45   S   S J4630  840418 1230   350    U! 700   U! 700   U! 700   U! 700   U!3910   !3500   U!3500   U! 700   U!
LOCATION 24                       33   M   S J4631  840418 1247   470    U! 940   U! 940   U! 940   U! 940   U! 550  M! 470   U! 470   U! 940   U!
LOCATION 25                       25   S   S J4623  840417 1210   355    U! 710   U! 710   U! 710   U! 710   U! 355  M! 355   U! 355   U! 710   U!
LOCATION 26                       35   S   S J4627  840418 1051    11.6KU!  58.2KU!  58.2KU!  58.2KU!  58.2KM!  67.3 K!  11.6KM!  11.6KM!  58.2KU!
LOCATION 27                       30   S   S J4628  840418 1107   756    U!1513   U!1513   U!1513   U!1513   U!  47.8 K! 756   U! 756   U!1513   U!
LOCATION 28                       34   S   S J4629  840418 1116     8.1KU!  16.1KU!  58.2KU!  58.2KU!  58.2KM!   8.0KM!   8.0KU!   8.0KU!  16.1KU!
LOCATION 29                       35   M   S J4632  840418 1305   460    U! 920   U! 920   U! 920   U! 920   U! 480  M! 460   U! 460   U! 920   U!
LOCATION 30                       40   M   S J4633  840418 1320   860    U!1720   U!1720   U!1720   U!1720   U!9100   ! 860   U! 860   U!1720   U!
LOCATION 31                       35   M   S J4634  840418 1341   700    U!1400   U!1400   U!1400   U!1400   U! 700  U! 700   U! 700   U!1400   U!
LOCATION 32                        0   S   S J4624  840417 1415   269    U! 538   U! 538   U! 538   U! 538   U! 269  M! 269   U! 269   U! 538   U!
LOCATION 33                       40   M   S J4637  840418 1439   776    U!1552   U!1552   U!1552   U!1552   U! 840  M! 776   U! 776   U!1552   U!
LOCATION 34                        0   S   S J4625  840417 1240   322    U! 644   U! 644   U! 644   U! 644   U!1320  M! 322   U! 322   U! 644   U!
LOCATION 36                       40   I   S J4641  840419 1014   444    U! 444   U! 444   U! 444   U! 444   U!2200  M! 444   U! 444   U! 444   U!
LOCATION 37                       10   M   S J4640  840419 1008   772    U!1544   U!1544   U!1544   U!1544   U!6400   ! 772   U! 772   U!1544   U!
LOCATION 38                       24   I   S J4643  840419 1043   313    U! 313   U! 313   U! 313   U! 313   U! 360  M! 313   U! 313   U! 313   U!
LOCATION 39                       40   I   S J4642  840419 1026   488    U! 488   U! 488   U! 488   U! 488   U!43920  ! 488   U! 488   U! 488   U!
LOCATION 40                        4   I   S J4644  840419 1052   385    U! 385   U! 385   U! 385   U! 385   U!1154  M! 385   U! 385   U! 385   U!
LOCATION 41                        0   S   S J4626  840417 1320   230    U! 461   U! 461   U! 461   U! 461   U! 230  M! 230   U! 230   U! 461   U!
LOCATION 42                       10   I   S J4645  840419 1102   290    U! 290   U! 290   U! 290   U! 290   U! 290  U! 290   U! 290   U! 290   U!
LOCATION 43                       33   I   S J4646  840419 1109   425    U! 425   U! 425   U! 425   U! 425   U! 511  M! 425   U! 425   U! 425   U!
LOCATION 44                       29   I   S J4649  840419 1221   400    U! 400   U! 400   U! 400   U! 400   U! 560  M! 400   U! 400   U! 400   U!
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ORGANIC ANALYSES
851107
                                                  VALUE CODES:                     UNITS ARE UG/KG (PPB) DRY WEIGHT
                                                    U - NOT DETECTED, VALUE SHOWN IS MINIMUM DETECTION LIMIT
                EAGLE HARBOR SURVEY                 M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
          4/17-18/84   SEDIMENTS / TISSUE           K - MULTIPLY VALUE SHOWN BY 1,000
             5/07/84      SEDIMENTS               ANALYSIS CODES:
                                                    P - PEDCO, S - S CUBED, M- MEAD COMPU CHEM, W - WEST COAST TEC
                                                  DEPTH IS IN FEET

                                            ------------------------ B A S E / N E U T R A L S ------------------------
                                                     3,3'-                                                 4-CHLORO 4-BROMO  BIS(2-
                                            1,4-DI   DICHLORO 2,4-     2,6-     1,2-DI                     PHENYL   PHENYL   CHLOROISO
                          DEP ANALY   OTR           CHLORO   BENZI    DINITRO  DINITRO  PHENYLHY FLUOR    PHENYL   PHENYL   PROPYL)
STATION DESCRIPTION        TH  SIS  M NUM     DATE  TIME BENZENE DINE     TOLUENE  TOLUENE  DRAZAINE ANTHENE  ETHER    ETHER    ETHER
-------------------------- --- ----- - ------ ------ ---- -------- -------- -------- -------- -------- -------- -------- -------- --------
LOCATION 45                 6    I   S J4648 840419 1214  286    U! 286   U! 286   U! 286   U! 286   U! 286   U! 286   U! 286   U! 286   U!
LOCATION 46                 4    I   S J4647 840419 1210  294    U! 294   U! 294   U! 294   U! 294   U! 294   U! 294   U! 294   U! 294   U!
LOCATION 48                35    M   S J4636 840418 1417  725    U!1450   U!1450   U!1450   U!1450   U!1000   M! 725   U! 725   U!1450   U!
LOCATION 49                35    M   S J4639 840419 0956  720    U!1440   U!1440   U!1440   U!1440   U! 720   M! 720   U! 720   U!1440   U!
LOCATION 50                32    M   S J4635 840418 1406  710    U!1420   U!1420   U!1420   U!1420   U! 710   M! 710   U! 710   U!1420   U!
LOCATION 51                45    I   S J4650 840419 1252 12500   U!12500  U!12500  U!12500  U!12500  U!102500  !12500  U!12500  U!12500  U!
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ORGANIC ANALYSES
851107

EAGLE HARBOR SURVEY
4/17-18/84 SEDIMENTS / TISSUE
5/07/84 SEDIMENTS

VALUE CODES: UNITS ARE UG/KG (PPB) DRY WEIGHT
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ANALYSIS CODES:
P - PEDCO, S - S CUBED, M- MEAD COMPU CHEM, W - WEST COAST TEC
DEPTH IS IN FEET

						B A S E / N E U T R A L S								
STATION DESCRIPTION	DEPTH	ANALYSIS	M	OTR NUM	DATE	TIME	BIS 2-CHLORO ETHOXY METHANE	HEXA CHLORO BUTA DIENE	HEXA CHLOROCY CLOPENT ADIENE	ISO PHORONE	NAPH THALENE	NITRO BENZENE	N-NITROSO DIMETHYL AMINE	N-NITROSO DIPHENYL AMINE	N-NITROSO DIPROPYL AMINE
LOCATION 1	5	P	S	J4601	840417	1215	1667 U	833 U	833 U	29625	833 U	833 U		13666	833 U
LOCATION 1A	0	M	S	J4638	840418	1240	1140 U	570 U	570 U	570 U	570 U	570 U	570 U	570 U	1140 U
LOCATION 2	5	P	S	J4613	840418	0930	1905 U	952 U	952 U	952 U	952 U	952 U		952 U	952 U
LOCATION 3	5	P	S	J4602	840417	1233	1429 U	714 U	714 U	714 U	714 U	714 U		25643	714 U
LOCATION 4	04	P	S	J4614	840418	0942	1333	666 U	666 U	666 U	666 U	666 U		666 U	666 U
LOCATION 5	5	P	S	J4603	840417	1254	1905 U	952 U	952 U	952 U	952 U	952 U		952 U	952 U
LOCATION 6	60	P	S	J4604	840417	1303	1667 U	833 U	833 U	833 U	833 U	833 U		833 U	833 U
LOCATION 7	0	P	S	J4620	840417	1015	1905 U	952 U	952 U	952 U	952 U	952 U		5714	952 U
LOCATION 8	5	P	S	J4615	840418	0953	2000 U	1000 U	1000 U	1000 U	1000 U	1000 U		1000 U	1000 U
LOCATION 9	2	P	S	J4605	840417	1312	2105 U	1053 U	1053 U	1053 U	1053 U	1053 U		1053 U	1053 U
LOCATION 10	35	P	S	J4606	840417	1327	1481 U	741 U	741 U	741 U	741 U	741 U		4926	741 U
LOCATION 11	0	S	S	J4621	840417	1045	508 U	254 U	254 U	254 U	254 U	254 U	508 U	254 U	254 U
LOCATION 12	40	P	S	J4607	840417	1336	2667 U	1333 U	1333 U	1333 U	1333 U	1333 U		5047 M	1333 U
LOCATION 13	0	S	S	J4622	840417	1145	718 U	359 U	359 U	359 U	359 M	359 U	718 U	359 U	359 U
LOCATION 14	3	P	S	J4616	840418	1001	1818 U	909 U	909 U	909 U	27182	909 U		5000	909 U
LOCATION 15	12	P	S	J4612	840417	1607	1428 U	714 U	714 U	714 U	714 U	714 U		714 U	714 U
LOCATION 16	35	P	S	J4611	840417	1558	1333 U	666 U	666 U	666 U	666 U	666 U		666 U	666 U
LOCATION 17	54	P	S	J4610	840417	1532	1429 U	714 U	714 U	714 U	714 U	714 U		714 U	714 U
LOCATION 18	50	P	S	J4609	840417	1520	930 U	465 U	465 U	465 U	465 U	465 U		465 U	465 U
LOCATION 19	45	P	S	J4608	840417	1505	976 U	488 U	488 U	488 U	488 U	488 U		488 U	488 U
LOCATION 20	3	P	S	J4617	840418	1011	1026 U	513 U	513 U	513 U	1277 M	513 U		5282	513 U
LOCATION 21	35	P	S	J4618	840418	1029	702 U	351 U	351 U	351 U	244 M	351 U		465 M	351 U
LOCATION 22	38	P	S	J4619	840418	1040	690 U	345 U	345 U	345 U	417 M	345 U		2000	345 U
LOCATION 23	45	S	S	J4630	840418	1230	700 U	350 U	350 U	350 U	599 M	350 U	700 U	350 M	350 U
LOCATION 24	33	M	S	J4631	840418	1247	940 U	470 U	470 U	470 U	470 U	470 U	470 U	470 U	940 U
LOCATION 25	25	S	S	J4623	840417	1210	710 U	355 U	355 U	355 U	355 U	355 U	710 U	355 U	355 U
LOCATION 26	35	S	S	J4627	840418	1051	58.2KU	11.6KU	11.6KU	11.6KU	11.6KU	11.6KU	23.3KU	11.6KU	11.6KU
LOCATION 27	30	S	S	J4628	840418	1107	1513 U	756 U	756 U	756 U	756 M	756 U	1513 U	756 U	756 U
LOCATION 28	34	S	S	J4629	840418	1116	16.1KU	8 KU	8 KU	8 KU	50.6 K	8 KU	16.1KU	8 KM	8 KU
LOCATION 29	35	M	S	J4632	840418	1305	920 U	460 U	460 U	460 U	460 U	460 U	460 U	460 U	920 U
LOCATION 30	40	M	S	J4633	840418	1320	1720 U	860 U	860 U	860 U	930 M	860 U	860 U	860 U	1720 U
LOCATION 31	35	M	S	J4634	840418	1341	1400 U	700 U	700 U	700 U	700 U	700 U	700 U	700 U	1400 U
LOCATION 32	0	S	S	J4624	840417	1415	538 U	269 U	269 U	269 U	269 U	269 U	538 U	269 U	269 U
LOCATION 33	40	M	S	J4637	840418	1439	1552 U	776 U	776 U	776 U	776 U	776 U	776 U	776 U	1552 U
LOCATION 34	0	S	S	J4625	840417	1240	644 U	322 U	322 U	322 U	322 M	322 U	644 U	322 U	322 U
LOCATION 36	40	I	S	J4641	840419	1014	444 U	444 U	444 U	444 U	444 U	444 U	444 U	444 U	444 U
LOCATION 37	10	M	S	J4640	840419	1008	1544 U	772 U	772 U	772 U	772 U	772 U	772 U	772 U	1544 U
LOCATION 38	24	I	S	J4643	840419	1043	313 U	313 U	313 U	313 U	313 U	313 U	313 U	313 U	313 U
LOCATION 39	40	I	S	J4642	840419	1026	488 U	488 U	488 U	488 U	488 U	488 U	488 U	488 U	488 U
LOCATION 40	4	I	S	J4644	840419	1052	385 U	385 U	385 U	385 U	385 U	385 U	385 U	385 U	385 U
LOCATION 41	0	S	S	J4626	840417	1320	461 U	230 U	230 U	230 U	230 M	230 U	461 U	230 U	230 U
LOCATION 42	10	I	S	J4645	840419	1102	290 U	290 U	290 U	290 U	290 U	290 U	290 U	290 U	290 U
LOCATION 43	33	I	S	J4646	840419	1109	425 U	425 U	425 U	425 U	425 U	425 U	425 U	425 U	425 U
LOCATION 44	29	I	S	J4649	840419	1221	400 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U	400 U

ORGANIC ANALYSES
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EAGLE HARBOR SURVEY
4/17-18/84 SEDIMENTS / TISSUE
5/07/84 SEDIMENTS

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U - NOT DETECTED, VALUE SHOWN IS MINIMUM DETECTION LIMIT
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K - MULTIPLY VALUE SHOWN BY 1,000
ANALYSIS CODES:
P - PEDCO, S - S CUBED, M- MEAD COMPU CHEM, W - WEST COAST TEC
DEPTH IS IN FEET

							BASE / NEUTRALS								
STATION DESCRIPTION	DEP TH	ANALY SIS	M	OTR NUM	DATE	TIME	BIS 2-CHLORO ETHOXY METHANE	HEXA CHLORO BUTA DIENE	HEXA CHLOROCY CLOPENT ADIENE	ISO PHORONE	NAPH THALENE	NITRO BENZENE	N- NITROSO DIMETHYL AMINE	N- NITROSO DIPHENYL AMINE	N- NITROSO DIPROPYL AMINE
LOCATION 45	6	I	S	J4648	840419	1214	286 U!	286 U!	286 U!	286 U!	286 U!	286 U!	286 U!	286 U!	286 U!
LOCATION 46	4	I	S	J4647	840419	1210	294 U!	294 U!	294 U!	294 U!	294 U!	294 U!	294 U!	294 U!	294 U!
LOCATION 48	35	M	S	J4636	840418	1417	1450 U!	725 U!	725 U!	725 U!	725 U!	725 U!	725 U!	725 U!	1450 U!
LOCATION 49	35	M	S	J4639	840419	0956	1440 U!	720 U!	720 U!	720 U!	720 U!	720 U!	720 U!	720 U!	1440 U!
LOCATION 50	32	M	S	J4635	840418	1406	1420 U!	710 U!	710 U!	710 U!	710 U!	710 U!	710 U!	710 U!	1420 U!
LOCATION 51	45	I	S	J4650	840419	1252	12500 U!	12500 U!	12500 U!	12500 U!	12500 U!	12500 U!	12500 U!	12500 U!	12500 U!

ORGANIC ANALYSES
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EAGLE HARBOR SURVEY
4/17-18/84 SEDIMENTS / TISSUE
5/07/84 SEDIMENTS

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ANALYSIS CODES:
P - PEDCO, S - S CUBED, M- MEAD COMPU CHEM, W - WEST COAST TEC
DEPTH IS IN FEET

							BASE / NEUTRALS								
STATION DESCRIPTION	DEPTH	ANALYSIS	M	OTR NUM	DATE	TIME	BIS 2-ETHYL HEXYL PHTHALAT	BENZYL BUTYL PHTHALAT	DI-N-BUTYL PHTHALAT	DI-N-OCTYL PHTHALAT	DIETHYL PHTHALAT	DIMETHYL PHTHALAT	BENZO A ANTHRACENE	BENZO A PYRENE	BENZO B FLUORANTHENE
LOCATION 1	5	P	S	J4601	840417	1215	833 U!	833 U!	833 U!	833 U!	833 U!	833 U!	833 U!	1667 U!	1667 U!
LOCATION 1A	0	M	S	J4638	840418	1240	570 U!	570 U!	570 U!	570 U!	570 U!	570 U!	570 U!	1140 U!	1140 U!
LOCATION 2	5	P	S	J4613	840418	0930	952 U!	952 U!	952 U!	952 U!	952 U!	952 U!	952 U!	1905 U!	1905 U!
LOCATION 3	5	P	S	J4602	840417	1233	714 U!	714 U!	714 U!	714 U!	714 U!	714 U!	714 U!	1429 U!	1429 U!
LOCATION 4	04	P	S	J4614	840418	0942	666 U!	666 U!	666 U!	666 U!	666 U!	666 U!	666 U!	1333 U!	1333 U!
LOCATION 5	5	P	S	J4603	840417	1254	952 U!	952 U!	952 U!	14048 !	952 U!	952 U!	952 U!	1905 U!	1905 U!
LOCATION 6	60	P	S	J4604	840417	1303	833 U!	833 U!	833 U!	833 U!	833 U!	833 U!	833 U!	1667 U!	1667 U!
LOCATION 7	0	P	S	J4620	840417	1015	952 U!	952 U!	952 U!	952 U!	952 U!	952 U!	952 U!	1905 U!	1905 U!
LOCATION 8	5	P	S	J4615	840418	0953	1000 U!	1000 U!	1000 U!	1000 U!	1000 U!	1000 U!	1000 U!	2000 U!	2000 U!
LOCATION 9	2	P	S	J4605	840417	1312	1053 U!	1053 U!	1053 U!	1053 U!	1053 U!	1053 U!	1053 U!	2105 U!	2105 U!
LOCATION 10	35	P	S	J4606	840417	1327	741 U!	741 U!	2581 M!	741 U!	4629 !	741 U!	778 M!	1481 U!	1481 U!
LOCATION 11	0	S	S	J4621	840417	1045	3540 M!	254 U!	254 M!	254 U!	254 M!	254 U!	254 U!	508 U!	508 U!
LOCATION 12	40	P	S	J4607	840417	1336	7200 !	8400 !	2587 M!	23867 !	6267 !	1333 U!	1333 U!	2667 U!	2667 U!
LOCATION 13	0	S	S	J4622	840417	1145	359 M!	359 U!	359 M!	359 U!	359 M!	359 U!	359 M!	718 M!	718 M!
LOCATION 14	3	P	S	J4616	840418	1001	909 U!	909 U!	909 U!	909 U!	909 U!	909 U!	909 U!	1818 U!	1818 U!
LOCATION 15	12	P	S	J4612	840417	1607	714 U!	714 U!	714 U!	714 U!	714 U!	714 U!	3500 M!	1428 U!	!
LOCATION 16	35	P	S	J4611	840417	1558	666 U!	666 U!	666 U!	666 U!	666 U!	666 U!	666 U!	1333 U!	1333 U!
LOCATION 17	54	P	S	J4610	840417	1532	714 U!	714 U!	714 U!	714 U!	714 U!	714 U!	714 U!	1429 U!	1429 U!
LOCATION 18	50	P	S	J4609	840417	1520	465 U!	465 U!	465 U!	465 U!	465 U!	465 U!	465 U!	930 U!	!
LOCATION 19	45	P	S	J4608	840417	1505	5878 !	488 U!	488 U!	488 U!	488 U!	488 U!	912 M!	976 U!	976 U!
LOCATION 20	3	P	S	J4617	840418	1011	513 U!	513 U!	513 U!	513 U!	513 U!	1574 M!	3949 !	1821 M!	!
LOCATION 21	35	P	S	J4618	840418	1029	351 U!	351 U!	351 U!	351 U!	351 U!	351 U!	351 U!	8789 !	702 U!
LOCATION 22	38	P	S	J4619	840418	1040	345 U!	345 U!	345 U!	345 U!	345 U!	345 U!	2397 !	1879 M!	!
LOCATION 23	45	S	S	J4630	840418	1230	350 U!	350 U!	350 M!	350 U!	350 U!	350 U!	1760 !	2170 M!	4990 !
LOCATION 24	33	M	S	J4631	840418	1247	470 U!	470 U!	470 U!	470 U!	470 U!	470 U!	470 U!	940 U!	940 U!
LOCATION 25	25	S	S	J4623	840417	1210	355 M!	355 U!	355 M!	355 U!	355 M!	355 U!	355 M!	710 M!	710 M!
LOCATION 26	35	S	S	J4627	840418	1051	11.6KU!	11.6KU!	11.6KM!	11.6KU!	11.6KU!	11.6KU!	28.4KM!	23.3KM!	32.9KM!
LOCATION 27	30	S	S	J4628	840418	1107	756 U!	756 U!	756 U!	756 U!	756 U!	756 U!	41.3 K!	9.8 K!	29.5 K!
LOCATION 28	34	S	S	J4629	840418	1116	8 KU!	8 KU!	8 KM!	8 KU!	8 KU!	8 KU!	21.1KM!	16.1KM!	16.1KM!
LOCATION 29	35	M	S	J4632	840418	1305	460 U!	460 U!	460 U!	460 U!	460 U!	460 U!	560 M!	920 U!	1100 M!
LOCATION 30	40	M	S	J4633	840418	1320	860 U!	860 U!	860 U!	860 U!	860 U!	860 U!	2400 M!	1720 M!	2800 M!
LOCATION 31	35	M	S	J4634	840418	1341	700 U!	700 U!	700 U!	700 U!	700 U!	700 U!	700 U!	1400 U!	1400 M!
LOCATION 32	0	S	S	J4624	840417	1415	269 M!	269 U!	269 M!	269 U!	269 M!	269 U!	538 M!	538 U!	538 M!
LOCATION 33	40	M	S	J4637	840418	1439	776 U!	776 U!	776 U!	776 U!	776 U!	776 U!	840 M!	1552 M!	3500 M!
LOCATION 34	0	S	S	J4625	840417	1240	322 M!	322 U!	322 U!	322 U!	322 M!	322 U!	491 M!	644 M!	899 M!
LOCATION 36	40	I	S	J4641	840419	1014	444 U!	444 U!	444 U!	444 U!	444 U!	444 U!	910 M!	2180 M!	1700 M!
LOCATION 37	10	M	S	J4640	840419	1008	772 M!	772 U!	772 U!	772 U!	772 U!	772 U!	2800 M!	1544 M!	7600 !
LOCATION 38	24	I	S	J4643	840419	1043	313 U!	313 U!	313 U!	313 U!	313 U!	313 U!	313 U!	313 U!	313 U!
LOCATION 39	40	I	S	J4642	840419	1026	488 U!	488 U!	488 U!	488 U!	488 U!	488 U!	14640 !	19032 !	20252 !
LOCATION 40	4	I	S	J4644	840419	1052	385 U!	385 U!	385 U!	385 U!	385 U!	385 U!	385 U!	1230 M!	1080 M!
LOCATION 41	0	S	S	J4626	840417	1320	230 M!	230 U!	230 U!	230 U!	230 U!	230 U!	230 M!	461 M!	461 M!
LOCATION 42	10	I	S	J4645	840419	1102	290 U!	290 U!	290 U!	290 U!	290 U!	290 U!	290 U!	290 U!	290 U!
LOCATION 43	33	I	S	J4646	840419	1109	425 U!	425 U!	425 U!	425 U!	425 U!	425 U!	425 U!	980 M!	830 M!
LOCATION 44	29	I	S	J4649	840419	1221	400 U!	400 U!	400 U!	400 U!	400 U!	400 U!	400 U!	660 M!	1040 M!

ORGANIC ANALYSES
851107

EAGLE HARBOR SURVEY
4/17-18/84 SEDIMENTS / TISSUE
5/07/84 SEDIMENTS

VALUE CODES:
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M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
K - MULTIPLY VALUE SHOWN BY 1,000
ANALYSIS CODES:
P - PEDCO, S - S CUBED, M- MEAD COMPU CHEM, W - WEST COAST TEC
DEPTH IS IN FEET

UNITS ARE UG/KG (PPB) DRY WEIGHT

							BASE / NEUTRALS									
STATION DESCRIPTION	DEP TH	ANALY SIS	M	OTR NUM	DATE	TIME	BIS 2-ETHYL HEXYL PHTHALAT	BENZYL BUTYL PHTHALAT	DI-N-BUTYL PHTHALAT	DI-N-OCTYL PHTHALAT	DIETHYL PHTHALAT	DIMETHYL PHTHALAT	BENZO A ANTHRA CENE	BENZO A PYRENE	BENZO B FLUORAN THENE	
LOCATION 45	6	I	S	J4648	840419	1214	286	U! 286	U! 286	U! 286	U! 286	U! 286	U! 286	U! 286	U! 286	U!
LOCATION 46	4	I	S	J4647	840419	1210	294	U! 294	U! 294	U! 294	U! 294	U! 294	U! 294	U! 294	U! 294	U!
LOCATION 48	35	M	S	J4636	840418	1417	725	U! 725	U! 725	U! 725	U! 725	U! 725	U!1200	M!1450	M!3000	M!
LOCATION 49	35	M	S	J4639	840419	0956	720	U! 720	U! 720	U! 720	U! 720	U! 720	U! 720	M!1440	U!1440	M!
LOCATION 50	32	M	S	J4635	840418	1406	710	U! 710	U! 710	U! 710	U! 710	U! 710	U! 710	M!1420	U!1420	M!
LOCATION'51	45	I	S	J4650	840419	1252	12500	U!12500	U!12500	U!12500	U!12500	U!12500	U!12500	U!12500	U!12500	U!

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ORGANIC ANALYSES
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                                                           VALUE CODES:                UNITS ARE UG/KG (PPB) DRY WEIGHT
                                                             U - NOT DETECTED, VALUE SHOWN IS MINIMUM DETECTION LIMIT
                         EAGLE HARBOR SURVEY                 M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
                  4/17-18/84   SEDIMENTS / TISSUE            K - MULTIPLY VALUE SHOWN BY 1,000
                     5/07/84       SEDIMENTS               ANALYSIS CODES:
                                                             P - PEDCO, S - S CUBED, M- MEAD COMPU CHEM, W - WEST COAST TEC
                                                           DEPTH IS IN FEET
                                                ------------------------ B A S E / N E U T R A L S ----------------------------
                                                BENZO K                                     BENZO                                   DIBENZO  INDENO
                           DEP ANALY    OTR             FLUORAN                ACENAPH  ANTHRA  GHI                     PHENAN  A,H ANTH 1,2,3-CD
STATION DESCRIPTION         TH  SIS   M NUM      DATE   TIME THENE   CHRYSENE THYLENE  CENE     PERYLENE FLUORENE THRENE  RACENE   PYRENE
-------------------------- --- ----- - ------  ------ ---- -------- -------- -------- -------- -------- -------- -------- -------- --------
LOCATION 1                   5   P   S J4601  840417 1215 1667    U!1667    U! 833   U! 833   U!1667   U! 833   U!1667   U!1667   U!1667   U!
LOCATION 1A                  0   M   S J4638  840418 1240 1140    U! 570    U! 570   U! 570   U!1140   U! 570   U! 570   U!1140   U!1140   U!
LOCATION 2                   5   P   S J4613  840418 0930 1905    U!1905    U! 952   U! 952   U!1905   U! 952   U! 952   U!1905   U!1905   U!
LOCATION 3                   5   P   S J4602  840417 1233 1429    U!1429    U! 714   U! 714   U!1429   U! 714   U!1429   U!1429   U!1429   U!
LOCATION 4                  04   P   S J4614  840418 0942 1333    U!1333    U! 666   U! 666   U!1333    ! 666   U! 666   U!1333   U!1333   U!
LOCATION 5                   5   P   S J4603  840417 1254 1905    U!1905    U! 952   U! 952   U!1905   U! 952   U! 952   U!1905   U!1905   U!
LOCATION 6                  60   P   S J4604  840417 1303 1667    U!1667    U! 833   U! 833   U!1667   U! 833   U!1117   M!1667   U!1667   U!
LOCATION 7                   0   P   S J4620  840417 1015 1905    U!1905    U! 952   U! 952   U!1905   U! 952   U!2619   M!1905   U!1905   U!
LOCATION 8                   5   P   S J4615  840418 0953 2000    U!2000    U!1000   U!1000   U!2000   U!1000   U!1000   U!2000   U!2000   U!
LOCATION 9                   2   P   S J4605  840417 1312 2105    U!2105    U!1053   U!1053   U!1053   U!1053   U!1053   U!2105   U!2105   U!
LOCATION 10                 35   P   S J4606  840417 1327 1481    U!1563    M! 741   U!2159   M!1481   U! 741   U!2000   M!1481   U!2663   M!
LOCATION 11                  0   S   S J4621  840417 1045  508    U! 508    U! 254   U! 254   U! 508   U! 254   U! 254   U! 508   U! 508   U!
LOCATION 12                 40   P   S J4607  840417 1336 2667    U!2667    U!1333   U!3073   M!2667   U!1333   U!2753   M!2667   U!2667   U!
LOCATION 13                  0   S   S J4622  840417 1145  718    M! 718    M! 359   U! 359   M! 718   U! 359   M! 359   M! 718   U! 718   U!
LOCATION 14                  3   P   S J4616  840418 1001 1818    U!1818    U! 909   U!2595   M!2477   M! 909   U!3609   M!1818   U!2382   M!
LOCATION 15                 12   P   S J4612  840417 1607 5136     !4714     ! 714   U!1686    !1428   U! 714   U!2039    !1428   U!1428   U!
LOCATION 16                 35   P   S J4611  840417 1558 1333    U!1333    U! 666   U! 666   U!1333   U!.666   U! 666   U!1333   U!1333   U!
LOCATION 17                 54   P   S J4610  840417 1532 1429    U!1429    U! 714   U! 714   U!1429   U! 714   U! 714   U!1429   U!1429   U!
LOCATION 18                 50   P   S J4609  840417 1520 2239    M!2419    M! 465   U!2170   M! 930   U! 465   U!1405   M! 930   U! 930   U!
LOCATION 19                 45   P   S J4608  840417 1505  976    U! 749    M! 488   U!1256   M! 976   U! 488   U! 990   M! 976   U! 976   U!
LOCATION 20                  3   P   S J4617  840418 1011 3841    M!5333     ! 513   U!10615   !1026   U!1231   M!14923   !1026   U!1026   U!
LOCATION 21                 35   P   S J4618  840418 1029  702    U!12544    ! 351   U!5114    ! 847   M! 351   U!6368    ! 665   M! 970   M!
LOCATION 22                 38   P   S J4619  840418 1040 1252    M!2776    M! 345   U!3207   M! 690   U! 345   U!4032    ! 690   U! 583   M!
LOCATION 23                 45   S   S J4630  840418 1230  700    U!1920    M! 350   M!2190    !1000   M! 693   M!3340    ! 700   M! 901   M!
LOCATION 24                 33   M   S J4631  840418 1247  940    U! 470    M! 470   U! 470   M! 940   U! 470   U! 470   M! 940   U! 940   U!
LOCATION 25                 25   S   S J4623  840417 1210  710    M! 710    M! 355   U! 355   M! 710   U! 355   M! 355   M! 710   U! 710   U!
LOCATION 26                 35   S   S J4627  840418 1051   23.3KU!   33   KM!   11.6KM!   11.6KM!   23.3KM!   11.6KM!   11.6KM!   23.3KU!   23.3KU!
LOCATION 27                 30   S   S J4628  840418 1107 1513    U!   22.6 K! 756    M!6590    !4540   M! 945   M!8810    !2730   M!4590   M!
LOCATION 28                 34   S   S J4629  840418 1116   16.1KU!   16.1KM!    8   KM!   28   KM!   16.1KU!   77.9 K! 200    K!   16.1KU!   16.1KU!
LOCATION 29                 35   M   S J4632  840418 1305 1100    M! 640    M! 460   U! 460   M! 920   U! 460   U! 460   M! 920   U! 920   U!
LOCATION 30                 40   M   S J4633  840418 1320 1720    U!3000    M! 860   U!8900    !1720   U! 910   M!3300   M!1720   U!1720   U!
LOCATION 31                 35   M   S J4634  840418 1341 1400    U! 700    M! 700   U! 700   U!1400   U! 700   U! 700   U!1400   U!1400   U!
LOCATION 32                  0   S   S J4624  840417 1415  538    U! 538    M! 269   U! 269   U! 538   U! 269   U! 269   M! 538   U! 538   U!
LOCATION 33                 40   M   S J4637  840418 1439 1552    U!1700    M! 776   U! 776   M!1552   U! 776   U! 776   M!1552   U!1552   U!
LOCATION 34                  0   S   S J4625  840417 1240  644    U! 836    M! 322   U! 322   M! 644   U! 322   M! 491   M! 644   U! 644   M!
LOCATION 36                 40   I   S J4641  840419 1014  444    U!1890    M! 444   U! 444   U! 444   U! 444   U!1200   M! 444   U! 444   U!
LOCATION 37                 10   M   S J4640  840419 1008 7600     !2900    M! 772   U!1200   M!1544   U! 772   U!1900   M!1544   U!1544   U!
LOCATION 38                 24   I   S J4643  840419 1043  313    U! 313    U! 313   U! 313   U! 313   U! 313   U! 313   U! 313   U! 313   U!
LOCATION 39                 40   I   S J4642  840419 1026  488    U!17080    !1781   M!10248   !4148    !1635   M!7808    ! 488   U!4636    !
LOCATION 40                  4   I   S J4644  840419 1052  385    U!1596    M! 385   U! 385   U! 385   U! 385   U! 558   M! 385   U! 385   U!
LOCATION 41                  0   S   S J4626  840417 1320  461    U! 461    M! 230   U! 230   M! 461   U! 230   U! 230   M! 461   U! 461   M!
LOCATION 42                 10   I   S J4645  840419 1102  290    U! 290    U! 290   U! 290   U! 290   U! 290   U! 290   U! 290   U! 290   U!
LOCATION 43                 33   I   S J4646  840419 1109  425    U! 915    M! 425   U! 425   U! 425   U! 425   U! 425   U! 425   U! 425   U!
LOCATION 44                 29   I   S J4649  840419 1221  400    U! 760    M! 400   U! 400   U! 400   U! 400   U! 400   U! 400   U! 400   U!
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ORGANIC ANALYSES
851107

EAGLE HARBOR SURVEY
4/17-18/84 SEDIMENTS / TISSUE
5/07/84 SEDIMENTS

VALUE CODES: UNITS ARE UG/KG (PPB) DRY WEIGHT
U - NOT DETECTED, VALUE SHOWN IS MINIMUM DETECTION LIMIT
M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
K - MULTIPLY VALUE SHOWN BY 1,000
ANALYSIS CODES:
P - PEDCO, S - S CUBED, M- MEAD COMPU CHEM, W - WEST COAST TEC
DEPTH IS IN FEET

							B A S E / N E U T R A L S								
STATION DESCRIPTION	DEPTH	ANALYSIS	M	OTR NUM	DATE	TIME	BENZO K FLUORANTHENE	CHRYSENE	ACENAPHTHYLENE	ANTHRACENE	BENZO GHI PERYLENE	FLUORENE	PHENANTHRENE	DIBENZO A,H ANTHRACENE	INDENO 1,2,3-CD PYRENE
LOCATION 45	6	I	S	J4648	840419	1214	286 U!	286 U!	286 U!	286 U!	286 U!	286 U!	286 U!	286 U!	286 U!
LOCATION 46	4	I	S	J4647	840419	1210	294 U!	294 U!	294 U!	294 U!	294 U!	294 U!	294 U!	294 U!	294 U!
LOCATION 48	35	M	S	J4636	840418	1417	1450 U!	1800 M!	725 U!	725 M!	1450 M!	725 U!	725 M!	1450 U!	1450 M!
LOCATION 49	35	M	S	J4639	840419	0956	1440 U!	720 M!	720 U!	720 U!	1440 U!	720 U!	720 U!	1440 U!	1440 U!
LOCATION 50	32	M	S	J4635	840418	1406	1420 U!	900 M!	710 U!	710 U!	1420 U!	710 U!	710 M!	1420 U!	1420 U!
LOCATION 51	45	I	S	J4650	840419	1252	12500 U!	37500 M!	12500 U!	15500 M!	12500 U!	12500 U!	32500 M!	12500 U!	12500 U!

ORGANIC ANALYSES
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EAGLE HARBOR SURVEY
4/17-18/84 SEDIMENTS / TISSUE
5/07/84 SEDIMENTS

VALUE CODES: UNITS ARE UG/KG (PPB) DRY WEIGHT
U - NOT DETECTED, VALUE SHOWN IS MINIMUM DETECTION LIMIT
M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
K - MULTIPLY VALUE SHOWN BY 1,000
ANALYSIS CODES:
P - PEDCO, S - S CUBED, M- MEAD COMPU CHEM, W - WEST COAST TEC
DEPTH IS IN FEET

							BASE / NEUTRALS			
STATION DESCRIPTION	DEP TH	ANALY SIS	M	OTR NUM	DATE	TIME	PYRENE	BENZO(A)ANTHRACENE/ CHRYSENE	TOTAL PNA DETECTION LIMIT	TOTAL PNA'S/ DETECTED
LOCATION 1	5	P	S	J4601	840417	1215	833 U		20000	0
LOCATION 1A	0	M	S	J4638	840418	1240	570 M		11400	1140
LOCATION 2	5	P	S	J4613	840418	0930	952 U		21903	0
LOCATION 3	5	P	S	J4602	840417	1233	714 U		17144	0
LOCATION 4	04	P	S	J4614	840418	0942	666 U		15325	0
LOCATION 5	5	P	S	J4603	840417	1254	952 U		21903	0
LOCATION 6	60	P	S	J4604	840417	1303	833 U		18333	1117
LOCATION 7	0	P	S	J4620	840417	1015	952 U		20951	2619
LOCATION 8	5	P	S	J4615	840418	0953	1000 U		23000	0
LOCATION 9	2	P	S	J4605	840417	1312	1053 U		23160	0
LOCATION 10	35	P	S	J4606	840417	1327	1589 M		10369	12430
LOCATION 11	0	S	S	J4621	840417	1045	254 U		5842	0
LOCATION 12	40	P	S	J4607	840417	1336	1333 U		28000	5826
LOCATION 13	0	S	S	J4622	840417	1145	397 M		2513	5988
LOCATION 14	3	P	S	J4616	840418	1001	2559 M		11817	54404
LOCATION 15	12	P	S	J4612	840417	1607	4843		8568	28061
LOCATION 16	35	P	S	J4611	840417	1558	666 U		15325	0
LOCATION 17	54	P	S	J4610	840417	1532	714 U		16429	0
LOCATION 18	50	P	S	J4609	840417	1520	1909 M		6045	11972
LOCATION 19	45	P	S	J4608	840417	1505	866 M		7808	5721
LOCATION 20	3	P	S	J4617	840418	1011	11128		4104	67913
LOCATION 21	35	P	S	J4618	840418	1029	12730		3159	48271
LOCATION 22	38	P	S	J4619	840418	1040	7897		2415	26337
LOCATION 23	45	S	S	J4630	840418	1230	6760		700	31729
LOCATION 24	33	M	S	J4631	840418	1247	470 M		7990	2430
LOCATION 25	25	S	S	J4623	840417	1210	355 M		3195	4970
LOCATION 26	35	S	S	J4627	840418	1051	65.6K		81529	332023
LOCATION 27	30	S	S	J4628	840418	1107	61.7K		1513	243143
LOCATION 28	34	S	S	J4629	840418	1116	69.7K		64220	595119
LOCATION 29	35	M	S	J4632	840418	1305	970 M		5520	5770
LOCATION 30	40	M	S	J4633	840418	1320	7800		8560	40860
LOCATION 31	35	M	S	J4634	840418	1341	700 M		12600	2800
LOCATION 32	0	S	S	J4624	840417	1415	269 M		4035	2421
LOCATION 33	40	M	S	J4637	840418	1439	2900 M		9312	12884
LOCATION 34	0	S	S	J4625	840417	1240	994 M		2254	7607
LOCATION 36	40	I	S	J4641	840419	1014	2150 M		3996	12230
LOCATION 37	10	M	S	J4640	840419	1008	8600		7720	40544
LOCATION 38	24	I	S	J4643	840419	1043	453 M		4382	813
LOCATION 39	40	I	S	J4642	840419	1026	36600		1952	181780
LOCATION 40	4	I	S	J4644	840419	1052	1170 M		3850	6788
LOCATION 41	0	S	S	J4626	840417	1320	230 M		2073	3224
LOCATION 42	10	I	S	J4645	840419	1102	290 U		4640	0
LOCATION 43	33	I	S	J4646	840419	1109	800 M		4675	4036
LOCATION 44	29	I	S	J4649	840419	1221	1120 M		4400	4140

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ORGANIC ANALYSES
851107
                                                            VALUE CODES:                UNITS ARE UG/KG (PPB) DRY WEIGHT
                                                              U - NOT DETECTED, VALUE SHOWN IS MINIMUM DETECTION LIMIT
                     EAGLE HARBOR SURVEY                      M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
                4/17-18/84   SEDIMENTS / TISSUE               K - MULTIPLY VALUE SHOWN BY 1,000
                  5/07/84       SEDIMENTS                   ANALYSIS CODES:
                                                              P - PEDCO, S - S CUBED, M- MEAD COMPU CHEM, W - WEST COAST TEC
                                                            DEPTH IS IN FEET
                                                 ------------------------ B A S E  /  N E U T R A L S ------------------------
                          DEP ANALY   OTR                            BENZO(A)ANTHRACENE/     TOTAL PNA       / TOTAL PNA'S/
STATION DESCRIPTION        TH  SIS  M NUM     DATE   TIME PYRENE     CHRYSENE             DETECTION LIMIT       DETECTED
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LOCATION 45                 6    I   S J4648  840419 1214    286  U!                      !          4576     !          0  !
LOCATION 46                 4    I   S J4647  840419 1210    294  U!                      !          4704     !          0  !
LOCATION 48                35    M   S J4636  840418 1417   2100  M!                      !          5800     !      14900  !
LOCATION 49                35    M   S J4639  840419 0956    750  M!                      !         11520     !       4350  !
LOCATION 50                32    M   S J4635  840418 1406    950  M!                      !         10650     !       5400  !
LOCATION 51                45    I   S J4650  840419 1252  82500   !                      !        100000     !     308750  !
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ORGANIC ANALYSES
851107

EAGLE HARBOR SURVEY
4/17-18/84 SEDIMENTS / TISSUE
5/07/84 SEDIMENTS

VALUE CODES: UNITS: UG/KG (PPB) DRY WEIGHT
U - NOT DETECTED, VALUE SHOWN IS MINIMUM QUANTIIFIABLE LIMIT
M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
K - MULTIPLY VALUE SHOWN BY 1,000
ANALYSIS CODES: (INDICATE LAB PERFORMING ANBALYSIS)
P-PEDCO, S-S CUBED, M-MEAD COMPU CHEM, W-WEST COAST TECHNICAL
DEPTH IS IN FEET

							VOLATILES									
STATION DESCRIPTION	DEP TH	ANALY SIS	M	OTR NUM	DATE	TIME	ACROLEIN	ACRYLO NITRILE	BENZENE	CARBON TETRA CHLORIDE	CHLORO BENZENE	1,2- DICHLORO ETHANE	1,1,1- TRICHLOR ETHANE	1,1- DICHLORO ETHANE	1,1,2- TRICHLOR ETHANE
LOCATION 1	5	P	S	J4601	840417	1215	8333 U!	8333 U!	417 U!	417 U!	417 U!	417 U!	417 U!	417 U!	417 U!
LOCATION 1A	0	M	S	J4638	840418	1240	70 U!	70 U!	3.5 U!	3.5 U!	3.5 U!	3.5 U!	3.5 U!	3.5 U!	3.5 U!
LOCATION 2	5	P	S	J4613	840418	0930	9524 U!	9524 U!	476 U!	476 U!	476 U!	476 U!	476 U!	476 U!	476 U!
LOCATION 3	5	P	S	J4602	840417	1233	140000 U!	140000 U!	7000 U!	7000 U!	7000 U!	7000 U!	7000 U!	7000 U!	7000 U!
LOCATION 4	04	P	S	J4614	840418	0942	6667 U!	6667 U!	333 U!	333 U!	333 U!	333 U!	333 U!	333 U!	333 U!
LOCATION 5	5	P	S	J4603	840417	1254	9524 U!	9524 U!	4760 U!	4760 U!	4760 U!	4760 U!	4760 U!	4760 U!	4760 U!
LOCATION 6	60	P	S	J4604	840417	1303	8333 U!	8333 U!	417 U!	417 U!	417 U!	417 U!	417 U!	417 U!	417 U!
LOCATION 7	0	P	S	J4620	840417	1015	9524 U!	9524 U!	476 U!	476 U!	476 U!	476 U!	476 U!	476 U!	476 U!
LOCATION 8	5	P	S	J4615	840418	0953	10000 U!	10000 U!	500 U!	500 U!	500 U!	500 U!	500 U!	500 U!	500 U!
LOCATION 9	2	P	S	J4605	840417	1312	10526 U!	10526 U!	526 U!	526 U!	526 U!	526 U!	526 U!	526 U!	526 U!
LOCATION 10	35	P	S	J4606	840417	1327	7407 U!	7407 U!	370 U!	370 U!	370 U!	370 U!	370 U!	370 U!	370 U!
LOCATION 11	0	S	S	J4621	840417	1045	115 U!	115 U!	5.7 U!	5.7 U!	5.7 U!	0.87U!	5.7 U!	5.7 U!	5.7 U!
LOCATION 12	40	P	S	J4607	840417	1336	13333 U!	13333 U!	667 U!	667 U!	667 U!	667 U!	667 U!	667 U!	667 U!
LOCATION 13	0	S	S	J4622	840417	1145	156 U!	156 U!	7.8 U!	7.8 U!	7.8 U!	1.6 U!	7.8 U!	7.8 U!	7.8 U!
LOCATION 14	3	P	S	J4616	840418	1001	9090 U!	9090 U!	454.5 U!	454.5 U!	454.5 U!	454.5 U!	454.5 U!	454.5 U!	454.5 U!
LOCATION 15	12	P	S	J4612	840417	1607	7143 U!	7143 U!	352 U!	352 U!	352 U!	352 U!	352 U!	352 U!	352 U!
LOCATION 16	35	P	S	J4611	840417	1558	6667 U!	6667 U!	333 U!	333 U!	333 U!	333 U!	333 U!	333 U!	333 U!
LOCATION 17	54	P	S	J4610	840417	1532	7143 U!	7143 U!	357 U!	357 U!	357 U!	357 U!	357 U!	357 U!	357 U!
LOCATION 18	50	P	S	J4609	840417	1520	4651 U!	4651 U!	233 U!	233 U!	233 U!	233 U!	233 U!	233 U!	233 U!
LOCATION 19	45	P	S	J4608	840417	1505	4878 U!	4878 U!	244 U!	244 U!	244 U!	244 U!	244 U!	244 U!	244 U!
LOCATION 20	3	P	S	J4617	840418	1011	5128 U!	5128 U!	256 U!	256 U!	256 U!	256 U!	256 U!	256 U!	256 U!
LOCATION 21	35	P	S	J4618	840418	1029	3509 U!	3509 U!	175 U!	175 U!	175 U!	175 U!	175 U!	175 U!	175 U!
LOCATION 22	38	P	S	J4619	840418	1040	3448 U!	3448 U!	172 U!	172 U!	172 U!	172 U!	172 U!	172 U!	172 U!
LOCATION 23	45	S	S	J4630	840418	1230	176 U!	176 U!	8.8 U!	8.8 U!	8.8 U!	1.75U!	8.8 U!	8.8 U!	8.8 U!
LOCATION 24	33	M	S	J4631	840418	1247	60 U!	60 U!	3 U!	3 U!	3 U!	3 U!	3 U!	3 U!	3 U!
LOCATION 25	25	S	S	J4623	840417	1210	131 U!	131 U!	6.5 U!	6.5 U!	6.5 U!	1.3 U!	6.5 U!	6.5 U!	6.5 U!
LOCATION 26	35	S	S	J4627	840418	1051	253 U!	253 U!	12.6 U!	12.6 U!	12.6 U!	2.5 U!	12.6 U!	12.6 U!	12.6 U!
LOCATION 27	30	S	S	J4628	840418	1107	268 U!	268 U!	13 U!	13 U!	13 U!	2.7 U!	13 U!	13 U!	13 U!
LOCATION 28	34	S	S	J4629	840418	1116	232 U!	232 U!	11.6 U!	11.6 U!	11.6 U!	2.3 U!	11.6 U!	11.6 U!	11.6 U!
LOCATION 29	35	M	S	J4632	840418	1305	57 U!	57 U!	2.8 U!	2.8 U!	2.8 U!	2.8 U!	2.8 U!	2.8 U!	2.8 U!
LOCATION 30	40	M	S	J4633	840418	1320	100 U!	100 U!	5 U!	5 U!	5 U!	5 U!	5 U!	5 U!	5 U!
LOCATION 31	35	M	S	J4634	840418	1341	90 U!	90 U!	4.5 U!	4.5 U!	4.5 U!	4.5 U!	4.5 U!	4.5 U!	4.5 U!
LOCATION 32	0	S	S	J4624	840417	1415	79 U!	79 U!	6.3 U!	6.3 U!	6.3 U!	1.3 U!	6.3 U!	6.3 U!	6.3 U!
LOCATION 33	40	M	S	J4637	840418	1439	100 U!	100 U!	5 U!	5 U!	5 U!	5 U!	5 U!	5 U!	5 U!
LOCATION 34	0	S	S	J4625	840417	1240	139 U!	139 U!	7 U!	7 U!	7 U!	1.4 U!	7 U!	7 U!	7 U!
LOCATION 36	40	I	S	J4641	840419	1014	111 U!	111 U!	11 U!	11 U!	11 U!	11 U!	11 U!	11 U!	11 U!
LOCATION 37	10	M	S	J4640	840419	1008	100 U!	100 U!	5 U!	5 U!	5 U!	5 U!	5 U!	5 U!	5 U!
LOCATION 38	24	I	S	J4643	840419	1043	78 U!	78 U!	7.8 U!	7.8 U!	7.8 U!	7.8 U!	7.8 U!	7.8 U!	7.8 U!
LOCATION 39	40	I	S	J4642	840419	1026	122 U!	122 U!	12 U!	12 U!	12 U!	12 U!	12 U!	12 U!	12 U!
LOCATION 40	4	I	S	J4644	840419	1052	96 U!	96 U!	9.6 U!	9.6 U!	9.6 U!	9.6 U!	9.6 U!	9.6 U!	9.6 U!
LOCATION 41	0	S	S	J4626	840417	1320	127 U!	127 U!	6.3 U!	6.3 U!	6.3 U!	1.3 U!	6.3 U!	6.3 U!	6.3 U!
LOCATION 42	10	I	S	J4645	840419	1102	72.5U!	72.5U!	7.2 U!	7.2 U!	7.2 U!	7.2 U!	7.2 U!	7.2 U!	7.2 U!
LOCATION 43	33	I	S	J4646	840419	1109	106 U!	106 U!	10.6 U!	10.6 U!	10.6 U!	10.6 U!	10.6 U!	10.6 U!	10.6 U!
LOCATION 44	29	I	S	J4649	840419	1221	100 U!	100 U!	10 U!	10 U!	10 U!	10 U!	10 U!	10 U!	10 U!

EAGLE HARBOR SURVEY
4/17-18/84 SEDIMENTS / TISSUE
5/07/84 SEDIMENTS

VALUE CODES: UNITS: UG/KG (PPB) DRY WEIGHT
U - NOT DETECTED, VALUE SHOWN IS MINIMUM QUANTIIFIABLE LIMIT
M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
K - MULTIPLY VALUE SHOWN BY 1,000
ANALYSIS CODES: (INDICATE LAB PERFORMING ANBALYSIS)
P-PEDCO, S-S CUBED, M-MEAD COMPU CHEM, W-WEST COAST TECHNICAL
DEPTH IS IN FEET

							VOLATILES								
STATION DESCRIPTION	DEPTH	ANALYSIS	M	OTR NUM	DATE	TIME	ACROLEIN	ACRYLONITRILE	BENZENE	CARBON TETRA CHLORIDE	CHLORO BENZENE	1,2-DICHLORO ETHANE	1,1,1-TRICHLOR ETHANE	1,1-DICHLORO ETHANE	1,1,2-TRICHLOR ETHANE
LOCATION 45	6	I	S	J4648	840419	1214	71 U!	71 U!	7.1 U!	7.1 U!	7.1 U!	7.1 U!	7.1 U!	7.1 U!	7.1 U!
LOCATION 46	4	I	S	J4647	840419	1210	74 U!	74 U!	7.4 U!	7.4 U!	7.4 U!	7.4 U!	7.4 U!	7.4 U!	7.4 U!
LOCATION 48	35	M	S	J4636	840418	1417	90 U!	90 U!	4.5 U!	4.5 U!	4.5 U!	4.5 U!	4.5 U!	4.5 U!	4.5 U!
LOCATION 49	35	M	S	J4639	840419	0956	100 U!	100 U!	5.0 U!	5.0 U!	5.0 U!	5.0 U!	5.0 U!	5.0 U!	5.0 U!
LOCATION 50	32	M	S	J4635	840418	1406	90 U!	90 U!	4.5 U!	4.5 U!	4.5 U!	4.5 U!	4.5 U!	4.5 U!	4.5 U!
LOCATION 51	45	I	S	J4650	840419	1252	126 U!	126 U!	12.6 U!	12.6 U!	12.6 U!	12.6 U!	12.6 U!	12.6 U!	12.6 U!

ORGANIC ANALYSES
851107

EAGLE HARBOR SURVEY
4/17-18/84 SEDIMENTS / TISSUE
5/07/84 SEDIMENTS

VALUE CODES: UNITS: UG/KG (PPB) DRY WEIGHT
U - NOT DETECTED, VALUE SHOWN IS MINIMUM QUANTIIFIABLE LIMIT
M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
K - MULTIPLY VALUE SHOWN BY 1,000
ANALYSIS CODES: (INDICATE LAB PERFORMING ANBALYSIS)
P-PEDCO, S-S CUBED, M-MEAD COMPU CHEM, W-WEST COAST TECHNICAL
DEPTH IS IN FEET

							VOLATILES								
STATION DESCRIPTION	DEPTH	ANALYSIS	M	OTR NUM	DATE	TIME	1,1,2,2-TETRA CHLORO ETHANE	CHLORO ETHANE	2-CHLORO ETHYL VINLY ETHER	CHLORO FORM	1,1-DICHLORO ETHENE	TRANS-1,2-DICHLORO ETHENE	1,2-DICHLORO PROPANE	TRANS-1,3-DICHLORO PROPENE	CIS-1,3-DICHLORO PROPENE
LOCATION 1	5	P	S	J4601	840417	1215	833 U!	833 U!	833 U!	417 U!	417 U!	417 U!	833 U!	417 U!	417 U!
LOCATION 1A	0	M	S	J4638	840418	1240	3.5U!	3.5U!	3.5U!	3.5 U!	3.5 U!	3.5 U!	3.5U!	3.5 U!	7 U!
LOCATION 2	5	P	S	J4613	840418	0930	952 U!	952 U!	952 U!	476 U!	476 U!	476 U!	952 U!	476 U!	476 U!
LOCATION 3	5	P	S	J4602	840417	1233	14000 U!	14000 U!	14000 U!	7000 U!	7000 U!	7000 U!	14000 U!	7000 U!	7000 U!
LOCATION 4	04	P	S	J4614	840418	0942	666 U!	666 U!	666 U!	333 U!	333 U!	333 U!	666 U!	333 U!	333 U!
LOCATION 5	5	P	S	J4603	840417	1254	952 U!	952 U!	952 U!	476 U!	476 U!	476 U!	952 U!	476 U!	476 U!
LOCATION 6	60	P	S	J4604	840417	1303	833 U!	833 U!	833 U!	417 U!	417 U!	417 U!	833 U!	417 U!	417 U!
LOCATION 7	0	P	S	J4620	840417	1015	952 U!	952 U!	8.6K!	476 U!	476 U!	476 U!	952 U!	476 U!	476 U!
LOCATION 8	5	P	S	J4615	840418	0953	1000 U!	1000 U!	1000 U!	500 U!	500 U!	500 U!	1000 U!	500 U!	500 U!
LOCATION 9	2	P	S	J4605	840417	1312	1053 U!	1053 U!	1053 U!	526 U!	526 U!	526 U!	105 !	526 U!	526 U!
LOCATION 10	35	P	S	J4606	840417	1327	741 U!	741 U!	741 U!	370 U!	370 U!	370 U!	741 U!	370 U!	370 U!
LOCATION 11	0	S	S	J4621	840417	1045	11.5U!	11.5U!	11.5U!	5.7 U!	5.7 U!	5.7 U!	11.5U!	5.7 U!	5.7 U!
LOCATION 12	40	P	S	J4607	840417	1336	1333 U!	1333 U!	1333 U!	667 U!	667 U!	667 U!	1333 U!	667 U!	667 U!
LOCATION 13	0	S	S	J4622	840417	1145	16 U!	16 U!	16 U!	7.8 U!	7.8 U!	7.8 U!	16 U!	7.8 U!	7.8 U!
LOCATION 14	3	P	S	J4616	840418	1001	909 U!	909 U!	909 U!	454.5 U!	454.5 U!	454.5 U!	909 U!	454.5 U!	454.5 U!
LOCATION 15	12	P	S	J4612	840417	1607	714 U!	714 U!	714 U!	357 U!	357 U!	357 U!	714 U!	357 U!	357 U!
LOCATION 16	35	P	S	J4611	840417	1558	66 U!	66 U!	66 U!	333 U!	333 U!	333 U!	666 U!	333 U!	333 U!
LOCATION 17	54	P	S	J4610	840417	1532	714 U!	714 U!	714 U!	357 U!	357 U!	357 U!	714 U!	357 U!	357 U!
LOCATION 18	50	P	S	J4609	840417	1520	465 U!	465 U!	465 U!	233 U!	233 U!	233 U!	465 U!	233 U!	233 U!
LOCATION 19	45	P	S	J4608	840417	1505	488 U!	488 U!	488 U!	244 U!	244 U!	244 U!	488 U!	244 U!	244 U!
LOCATION 20	3	P	S	J4617	840418	1011	513 U!	513 U!	513 U!	256 U!	256 U!	256 U!	513 U!	256 U!	256 U!
LOCATION 21	35	P	S	J4618	840418	1029	351 U!	351 U!	351 U!	175 U!	175 U!	175 U!	351 U!	175 U!	175 U!
LOCATION 22	38	P	S	J4619	840418	1040	345 U!	345 U!	345 U!	172 U!	172 U!	172 U!	345 U!	172 U!	172 U!
LOCATION 23	45	S	S	J4630	840418	1230	17.6U!	17.6U!	17.6U!	8.8 U!	8.8 U!	8.8 U!	17.6U!	8.8 U!	8.8 U!
LOCATION 24	33	M	S	J4631	840418	1247	3 U!	3 U!	3 U!	3 U!	3 U!	3 U!	3 U!	3 U!	6 U!
LOCATION 25	25	S	S	J4623	840417	1210	13 U!	13 U!	13 U!	6.5 U!	6.5 U!	6.5 U!	13 U!	6.5 U!	6.5 U!
LOCATION 26	35	S	S	J4627	840418	1051	25 U!	25 U!	25 U!	12.6 U!	12.6 U!	12.6 U!	25 U!	12.6 U!	12.6 U!
LOCATION 27	30	S	S	J4628	840418	1107	27 U!	27 U!	27 U!	13 U!	13 U!	13 U!	27 U!	13 U!	13 U!
LOCATION 28	34	S	S	J4629	840418	1116	23 U!	23 U!	23 U!	11.6 U!	11.6 U!	11.6 U!	23 U!	11.6 U!	11.6 U!
LOCATION 29	35	M	S	J4632	840418	1305	2.8U!	2.8U!	2.8U!	2.8 U!	2.8 U!	2.8 U!	2.8U!	2.8 U!	5.7 U!
LOCATION 30	40	M	S	J4633	840418	1320	5 U!	5 U!	5 U!	5 U!	5 U!	5 U!	5 U!	5 U!	10 U!
LOCATION 31	35	M	S	J4634	840418	1341	4.5U!	4.5U!	4.5U!	4.5 U!	4.5 U!	4.5 U!	4.5U!	4.5 U!	90 U!
LOCATION 32	0	S	S	J4624	840417	1415	8 U!	8 U!	8 U!	6.3 U!	6.3 U!	6.3 U!	8 U!	6.3 U!	6.3 U!
LOCATION 33	40	M	S	J4637	840418	1439	5 U!	5 U!	5 U!	5 U!	5 U!	5 U!	5 U!	5 U!	10 U!
LOCATION 34	0	S	S	J4625	840417	1240	14 U!	14 U!	14 U!	7 U!	7 U!	7 U!	14 U!	7 U!	7 U!
LOCATION 36	40	I	S	J4641	840419	1014	11 U!	11 U!	111 U!	11 U!	11 U!	11 U!	11 U!	11 U!	11 U!
LOCATION 37	10	M	S	J4640	840419	1008	5 U!	5 U!	5 U!	5 U!	5 U!	5 U!	5 U!	5 U!	10 U!
LOCATION 38	24	I	S	J4643	840419	1043	7.8U!	7.8U!	78 U!	7.8 U!	7.8 U!	7.8 U!	7.8U!	7.8 U!	7.8 U!
LOCATION 39	40	I	S	J4642	840419	1026	12 U!	12 U!	122 U!	12 U!	12 U!	12 U!	12 U!	12 U!	12 U!
LOCATION 40	4	I	S	J4644	840419	1052	9.6U!	9.6U!	96 U!	9.6 U!	9.6 U!	9.6 U!	9.6U!	9.6 U!	9.6 U!
LOCATION 41	0	S	S	J4626	840417	1320	12.7U!	12.7U!	12.7U!	6.3 U!	6.3 U!	6.3 U!	12.7U!	6.3 U!	6.3 U!
LOCATION 42	10	I	S	J4645	840419	1102	7.2U!	7.2U!	72 U!	7.2 U!	7.2 U!	7.2 U!	7.2U!	7.2 U!	7.2 U!
LOCATION 43	33	I	S	J4646	840419	1109	10.6U!	10.6U!	106 U!	10.6 U!	10.6 U!	10.6 U!	10.6U!	10.6 U!	10.6 U!
LOCATION 44	29	I	S	J4649	840419	1221	10 U!	10 U!	100 U!	10 U!	10 U!	10 U!	10 U!	10 U!	10 U!

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ORGANIC ANALYSES
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EAGLE HARBOR SURVEY
4/17-18/84 SEDIMENTS / TISSUE
5/07/84 SEDIMENTS

VALUE CODES: UNITS: UG/KG (PPB) DRY WEIGHT
U - NOT DETECTED, VALUE SHOWN IS MINIMUM QUANTIIFIABLE LIMIT
M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
K - MULTIPLY VALUE SHOWN BY 1,000
ANALYSIS CODES: (INDICATE LAB PERFORMING ANBALYSIS)
P-PEDCO, S-S CUBED, M-MEAD COMPU CHEM, W-WEST COAST TECHNICAL
DEPTH IS IN FEET

							V O L A T I L E S								
STATION DESCRIPTION	DEPTH	ANALYSIS	M	OTR NUM	DATE	TIME	1,1,2,2-TETRA CHLORO ETHANE	CHLORO ETHANE	2-CHLORO ETHYL VINLY ETHER	CHLORO FORM	1,1-DICHLORO ETHENE	TRANS-1,2-DICHLORO ETHENE	1,2-DICHLORO PROPANE	TRANS-1,3-DICHLORO PROPENE	CIS-1,3-DICHLORO PROPENE
LOCATION 45	6	I	S	J4648	840419	1214	7.1U!	7.1U!	71 U!	7.1 U!	7.1 U!	7.1 U!	7.1U!	7.1 U!	7.1 U!
LOCATION 46	4	I	S	J4647	840419	1210	7.4U!	7.4U!	74 U!	7.4 U!	7.4 U!	7.4 U!	7.4U!	7.4 U!	7.4 U!
LOCATION 48	35	M	S	J4636	840418	1417	4.5U!	4.5U!	4.5U!	4.5 U!	4.5 U!	4.5 U!	4.5U!	4.5 U!	9 U!
LOCATION 49	35	M	S	J4639	840419	0956	5.0U!	5.0U!	5.0U!	5.0 U!	5.0 U!	5.0 U!	5.0U!	5.0 U!	10 U!
LOCATION 50	32	M	S	J4635	840418	1406	4.5U!	4.5U!	4.5U!	4.5 U!	4.5 U!	4.5 U!	4.5U!	4.5 U!	90 U!
LOCATION 51	45	I	S	J4650	840419	1252	12.6U!	12.6U!	126 U!	12.6 U!	12.6 U!	12.6 U!	12.6U!	12.6 U!	12.6 U!

ORGANIC ANALYSES
851107

EAGLE HARBOR SURVEY
4/17-18/84 SEDIMENTS / TISSUE
5/07/84 SEDIMENTS

VALUE CODES: UNITS: UG/KG (PPB) DRY WEIGHT
U - NOT DETECTED, VALUE SHOWN IS MINIMUM QUANTIIFIABLE LIMIT
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K - MULTIPLY VALUE SHOWN BY 1,000
ANALYSIS CODES: (INDICATE LAB PERFORMING ANBALYSIS)
P-PEDCO, S-S CUBED, M-MEAD COMPU CHEM, W-WEST COAST TECHNICAL
DEPTH IS IN FEET

							VOLATILES								
STATION DESCRIPTION	DEP TH	ANALY SIS	M	OTR NUM	DATE	TIME	ETHYL BENZENE	METHYL LENE CHLORIDE	CHLORO METHANE	BROMO METHANE	BROMO FORM	BROMO DICHLORO METHANE	FLUORO TRICHLOR METHANE	DICHLORO DIFLUORO METHANE	CHLORO DIBROMO METHANE
LOCATION 1	5	P	S	J4601	840417	1215	417 U!	204 M!	833 U!	833 U!	833 U!	417 U!	417 U!	!	417 U!
LOCATION 1A	0	M	S	J4638	840418	1240	3.5 U!	3.5 M!	3.5U!	3.5U!	3.5U!	3.5 U!	3.5 U!	3.5 U!	3.5 U!
LOCATION 2	5	P	S	J4613	840418	0930	476 U!	32.4 M!	952 U!	952 U!	952 U!	476 U!	476 U!	!	476 U!
LOCATION 3	5	P	S	J4602	840417	1233	7000 U!	2646 M!	14000 U!	14000 U!	14000 U!	7000 U!	7000 U!	!	7000 U!
LOCATION 4	04	P	S	J4614	840418	0942	333 U!	23.3 !	666 U!	666 U!	666 U!	333 U!	333 U!	!	333 U!
LOCATION 5	5	P	S	J4603	840417	1254	476 U!	692 !	952 U!	952 U!	952 U!	476 U!	476 U!	!	476 U!
LOCATION 6	60	P	S	J4604	840417	1303	417 U!	157.5 U!	833 U!	833 U!	833 U!	417 U!	417 U!	!	417 U!
LOCATION 7	0	P.	S	J4620	840417	1015	476 U!	69.8 !	952 U!	952 U!	952 U!	476 U!	476 U!	!	476 U!
LOCATION 8	5	P	S	J4615	840418	0953	500 U!	25.5 M!	1000 U!	1000 U!	1000 U!	500 U!	500 U!	!	500 U!
LOCATION 9	2	P	S	J4605	840417	1312	526 U!	189 M!	1053 U!	1053 U!	1053 U!	526 U!	526 U!	!	526 U!
LOCATION 10	35	P	S	J4606	840417	1327	370 U!	60 M!	741 U!	741 U!	741 U!	370 U!	370 U!	!	370 U!
LOCATION 11	0	S	S	J4621	840417	1045	5.7 U!	5.7 U!	11.5U!	11.5U!	11.5U!	5.7 U!	!	!	5.7 U!
LOCATION 12	40	P	S	J4607	840417	1336	667 U!	437 M!	1333 U!	1333 U!	1333 U!	667 U!	667 U!	!	667 U!
LOCATION 13	0	S	S	J4622	840417	1145	7.8 U!	7.8 U!	16 U!	16 U!	16 U!	7.8 U!	!	!	7.8 U!
LOCATION 14	3	P	S	J4616	840418	1001	361 M!	96 M!	909 U!	909 U!	909 U!	454.5 U!	454.5 U!	!	454.5 U!
LOCATION 15	12	P	S	J4612	840417	1607	357 U!	112 M!	714 U!	714 U!	714 U!	357 U!	357 U!	!	357 U!
LOCATION 16	35	P	S	J4611	840417	1558	333 U!	91 M!	666 U!	666 U!	666 U!	333 U!	333 U!	!	333 U!
LOCATION 17	54	P	S	J4610	840417	1532	357 U!	113 M!	714 U!	714 U!	714 U!	357 U!	357 U!	!	357 U!
LOCATION 18	50	P	S	J4609	840417	1520	233 U!	52 M!	465 U!	465 U!	465 U!	233 U!	233 U!	!	233 U!
LOCATION 19	45	P	S	J4608	840417	1505	244 U!	112 M!	488 U!	488 U!	488 U!	244 U!	244 U!	!	244 U!
LOCATION 20	3	P	S	J4617	840418	1011	7.2 M!	11.3 M!	513 U!	513 U!	513 U!	256 U!	256 U!	!	256 U!
LOCATION 21	35	P	S	J4618	840418	1029	2.5 M!	6.5 M!	351 U!	351 U!	351 U!	175 U!	175 U!	!	175 U!
LOCATION 22	38	P	S	J4619	840418	1040	172 U!	36.7 M!	345 U!	345 U!	345 U!	172 U!	172 U!	!	172 U!
LOCATION 23	45	S	S	J4630	840418	1230	8.8 U!	8.8 U!	17.6U!	17.6U!	17.6U!	8.8 U!	!	!	8.8 U!
LOCATION 24	33	M	S	J4631	840418	1247	3 U!	3 M!	3 U!	3 U!	3 U!	3 U!	3 U!	3 U!	3 U!
LOCATION 25	25	S	S	J4623	840417	1210	6.5 U!	6.5 U!	13 U!	13 U!	13 U!	6.5 U!	!	!	6.5 U!
LOCATION 26	35	S	S	J4627	840418	1051	12.6 U!	12.6 M!	25 U!	25 U!	25 U!	12.6 U!	!	!	12.6 U!
LOCATION 27	30	S	S	J4628	840418	1107	13 U!	13 M!	27 U!	27 U!	27 U!	13 U!	!	!	13 U!
LOCATION 28	34	S	S	J4629	840418	1116	!	11.6 M!	23 U!	23 U!	23 U!	11.6 U!	!	!	11.6 U!
LOCATION 29	35	M	S	J4632	840418	1305	2.8 U!	2.8 U!	2.8U!	2.8U!	2.8U!	2.8 U!	2.8 U!	2.8 U!	2.8 U!
LOCATION 30	40	M	S	J4633	840418	1320	5 U!	!	5 U!	5 U!	5 U!	5 U!	5 U!	5 U!	5 U!
LOCATION 31	35	M	S	J4634	840418	1341	4.5 U!	4.5 U!	4.5U!	4.5U!	4.5U!	4.5 U!	4.5 U!	4.5 U!	4.5 U!
LOCATION 32	0	S	S	J4624	840417	1415	6.3 U!	6.3 M!	8 U!	8 U!	8 U!	6.3 U!	!	!	6.3 U!
LOCATION 33	40	M	S	J4637	840418	1439	5 U!	5 U!	5 U!	5 U!	5 U!	5 U!	5 U!	5 U!	5 U!
LOCATION 34	0	S	S	J4625	840417	1240	7 U!	7 U!	14 U!	14 U!	14 U!	7 U!	!	!	7 U!
LOCATION 36	40	I	S	J4641	840419	1014	11 U!	251 !	11 U!	11 U!	11 U!	11 U!	11 U!	11 U!	11 U!
LOCATION 37	10	M	S	J4640	840419	1008	5 U!	5 M!	5 U!	5 U!	5 U!	5 U!	5 M!	5 U!	5 U!
LOCATION 38	24	I	S	J4643	840419	1043	7.8 U!	176 !	7.8U!	7.8U!	7.8U!	7.8 U!	7.8 U!	7.8 U!	7.8 U!
LOCATION 39	40	I	S	J4642	840419	1026	12 U!	300 !	12 U!	12 U!	12 U!	12 U!	12 U!	12 U!	12 U!
LOCATION 40	4	I	S	J4644	840419	1052	9.6 U!	179 !	9.6U!	9.6U!	9.6U!	9.6 U!	9.6 U!	9.6 U!	9.6 U!
LOCATION 41	0	S	S	J4626	840417	1320	6.3 U!	6.3 M!	12.7U!	12.7U!	12.7U!	6.3 U!	!	!	6.3 U!
LOCATION 42	10	I	S	J4645	840419	1102	7.2 U!	77 !	7.2U!	7.2U!	7.2U!	7.2 U!	7.2 U!	7.2 U!	7.2 U!
LOCATION 43	33	I	S	J4646	840419	1109	10.6 U!	174 !	10.6U!	10.6U!	10.6U!	10.6 U!	10.6 U!	10.6 U!	10.6 U!
LOCATION 44	29	I	S	J4649	840419	1221	10 U!	246 !	10 U!	10 U!	10 U!	10 U!	10 U!	10 U!	10 U!

ORGANIC ANALYSES
851107

EAGLE HARBOR SURVEY
4/17-18/84 SEDIMENTS / TISSUE
5/07/84 SEDIMENTS

VALUE CODES: UNITS: UG/KG (PPB) DRY WEIGHT
U - NOT DETECTED, VALUE SHOWN IS MINIMUM QUANTIIFIABLE LIMIT
M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
K - MULTIPLY VALUE SHOWN BY 1,000
ANALYSIS CODES: (INDICATE LAB PERFORMING ANBALYSIS)
P-PEDCO, S-S CUBED, M-MEAD COMPU CHEM, W-WEST COAST TECHNICAL
DEPTH IS IN FEET

							VOLATILES								
STATION DESCRIPTION	DEP TH	ANALY SIS	M	OTR NUM	DATE	TIME	ETHYL BENZENE	METHYL LENE CHLORIDE	CHLORO METHANE	BROMO METHANE	BROMO FORM	BROMO DICHLORO METHANE	FLUORO TRICHLOR METHANE	DICHLORO DIFLUORO METHANE	CHLORO DIBROMO METHANE
LOCATION 45	6	I	S	J4648	840419	1214	7.1 U!	105 !	7.1U!	7.1U!	7.1U!	7.1 U!	7.1 U!	7.1 U!	7.1 U!
LOCATION 46	4	I	S	J4647	840419	1210	7.4 U!	210 !	7.4U!	7.4U!	7.4U!	7.4 U!	7.4 U!	7.4 U!	7.4 U!
LOCATION 48	35	M	S	J4636	840418	1417	4.5 U!	9 M!	4.5U!	4.5U!	4.5U!	4.5 U!	5.0 !	4.5 U!	4.5 U!
LOCATION 49	35	M	S	J4639	840419	0956	5.0 U!	5.0 U!	5.0U!	5.0U!	5.0U!	5.0 U!	5.0 U!	5.0 U!	5.0 U!
LOCATION 50	32	M	S	J4635	840418	1406	4.5 U!	4.5 U!	4.5U!	4.5U!	4.5U!	4.5 U!	4.5 U!	4.5 U!	4.5 U!
LOCATION 51	45	I	S	J4650	840419	1252	12.6 U!	360 !	12.6U!	12.6U!	12.6U!	12.6 U!	12.6 U!	12.6 U!	12.6 U!

ORGANIC ANALYSES
851107

EAGLE HARBOR SURVEY
4/17-18/84 SEDIMENTS / TISSUE
5/07/84 SEDIMENTS

VALUE CODES: UNITS: UG/KG (PPB) DRY WEIGHT
U - NOT DETECTED, VALUE SHOWN IS MINIMUM QUANTIIFIABLE LIMIT
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K - MULTIPLY VALUE SHOWN BY 1,000
ANALYSIS CODES: (INDICATE LAB PERFORMING ANBALYSIS)
P-PEDCO, S-S CUBED, M-MEAD COMPU CHEM, W-WEST COAST TECHNICAL
DEPTH IS IN FEET

STATION DESCRIPTION	DEPTH	ANALYSIS	M	OTR NUM	DATE	TIME	VOLATILES TETRA CHLORO ETHENE	 TOLUENE	 TRICHLOR ETHENE	 VINYL CHLORIDE
LOCATION 1	5	P	S	J4601	840417	1215	417 U!	417 U!	417 U!	833 U!
LOCATION 1A	0	M	S	J4638	840418	1240	3.5 U!	3.5 U!	3.5 U!	3.5U!
LOCATION 2	5	P	S	J4613	840418	0930	476 U!	476 U!	476 U!	952 U!
LOCATION 3	5	P	S	J4602	840417	1233	7000 U!	7000 U!	7000 U!	14000 U!
LOCATION 4	04	P	S	J4614	840418	0942	333 U!	333 U!	333 U!	666 U!
LOCATION 5	5	P	S	J4603	840417	1254	476 U!	476 U!	476 U!	952 U!
LOCATION 6	60	P	S	J4604	840417	1303	417 U!	417 U!	417 U!	833 U!
LOCATION 7	0	P	S	J4620	840417	1015	476 U!	476 U!	476 U!	952 U!
LOCATION 8	5	P	S	J4615	840418	0953	500 U!	500 U!	500 U!	1000 U!
LOCATION 9	2	P	S	J4605	840417	1312	526 U!	526 U!	526 U!	1053 U!
LOCATION 10	35	P	S	J4606	840417	1327	370 U!	370 U!	370 U!	741 U!
LOCATION 11	0	S	S	J4621	840417	1045	5.7 U!	5.7 U!	5.7 U!	11.5U!
LOCATION 12	40	P	S	J4607	840417	1336	667 U!	667 U!	667 U!	1333 U!
LOCATION 13	0	S	S	J4622	840417	1145	7.8 U!	7.8 U!	7.8 U!	16 U!
LOCATION 14	3	P	S	J4616	840418	1001	454.5 U!	454.5 U!	454.5 U!	909 U!
LOCATION 15	12	P	S	J4612	840417	1607	357 U!	357 U!	357 U!	714 U!
LOCATION 16	35	P	S	J4611	840417	1558	333 U!	333 U!	333 U!	666 U!
LOCATION 17	54	P	S	J4610	840417	1532	357 U!	357 U!	357 U!	714 U!
LOCATION 18	50	P	S	J4609	840417	1520	233 U!	233 U!	233 U!	465 U!
LOCATION 19	45	P	S	J4608	840417	1505	244 U!	244 U!	244 U!	488 U!
LOCATION 20	3	P	S	J4617	840418	1011	256 U!	256 U!	256 U!	513 U!
LOCATION 21	35	P	S	J4618	840418	1029	175 U!	175 U!	175 U!	351 U!
LOCATION 22	38	P	S	J4619	840418	1040	172 U!	172 U!	172 U!	345 U!
LOCATION 23	45	S	S	J4630	840418	1230	8.8 U!	8.8 U!	8.8 U!	17.6U!
LOCATION 24	33	M	S	J4631	840418	1247	3 U!	3 U!	3 U!	3 U!
LOCATION 25	25	S	S	J4623	840417	1210	6.5 U!	6.5 U!	6.5 U!	13 U!
LOCATION 26	35	S	S	J4627	840418	1051	12.6 U!	12.6 U!	12.6 U!	25 U!
LOCATION 27	30	S	S	J4628	840418	1107	13 U!	13 U!	13 U!	27 U!
LOCATION 28	34	S	S	J4629	840418	1116	11.6 U!	11.6 M!	11.6 U!	23 U!
LOCATION 29	35	M	S	J4632	840418	1305	2.8 U!	2.8 U!	2.8 U!	2.8U!
LOCATION 30	40	M	S	J4633	840418	1320	5 U!	5 U!	5 U!	5 U!
LOCATION 31	35	M	S	J4634	840418	1341	4.5 U!	4.5 U!	4.5 U!	4.5U!
LOCATION 32	0	S	S	J4624	840417	1415	6.3 U!	6.3 U!	6.3 U!	8 U!
LOCATION 33	40	M	S	J4637	840418	1439	5 U!	5 U!	5 U!	5 U!
LOCATION 34	0	S	S	J4625	840417	1240	7 U!	7 U!	7 U!	14 U!
LOCATION 36	40	I	S	J4641	840419	1014	11 U!	11 U!	11 U!	11 U!
LOCATION 37	10	M	S	J4640	840419	1008	5 U!	5 U!	5 U!	5 U!
LOCATION 38	24	I	S	J4643	840419	1043	7.8 U!	7.8 U!	7.8 U!	7.8U!
LOCATION 39	40	I	S	J4642	840419	1026	12 U!	12 U!	12 U!	12 U!
LOCATION 40	4	I	S	J4644	840419	1052	9.6 U!	9.6 U!	9.6 U!	9.6U!
LOCATION 41	0	S	S	J4626	840417	1320	6.3 U!	6.3 U!	6.3 U!	12.7U!
LOCATION 42	10	I	S	J4645	840419	1102	7.2 U!	7.2 U!	7.2 U!	7.2U!
LOCATION 43	33	I	S	J4646	840419	1109	10.6 U!	10.6 U!	10.6 U!	10.6U!
LOCATION 44	29	I	S	J4649	840419	1221	10 U!	10 U!	10 U!	10 U!

ORGANIC ANALYSES
851107

EAGLE HARBOR SURVEY
4/17-18/84 SEDIMENTS / TISSUE
5/07/84 SEDIMENTS

VALUE CODES: UNITS: UG/KG (PPB) DRY WEIGHT
U - NOT DETECTED, VALUE SHOWN IS MINIMUM QUANTIIFIABLE LIMIT
M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
K - MULTIPLY VALUE SHOWN BY 1,000
ANALYSIS CODES: (INDICATE LAB PERFORMING ANBALYSIS)
P-PEDCO, S-S CUBED, M-MEAD COMPU CHEM, W-WEST COAST TECHNICAL
DEPTH IS IN FEET

							VOLATILES			
STATION DESCRIPTION	DEPTH	ANALYSIS	M	OTR NUM	DATE	TIME	TETRA CHLORO ETHENE	TOLUENE	TRICHLOR ETHENE	VINYL CHLORIDE
LOCATION 45	6	I	S	J4648	840419	1214	7.1 U!	7.1 U!	7.1 U!	7.1U!
LOCATION 46	4	I	S	J4647	840419	1210	7.4 U!	7.4 U!	7.4 U!	7.4U!
LOCATION 48	35	M	S	J4636	840418	1417	4.5 U!	4.5 U!	4.5 U!	4.5U!
LOCATION 49	35	M	S	J4639	840419	0956	5.0 U!	5.0 U!	5.0 U!	5.0U!
LOCATION 50	32	M	S	J4635	840418	1406	4.5 U!	4.5 U!	4.5 U!	4.5U!
LOCATION 51	45	I	S	J4650	840419	1252	12.6 U!	12.6 U!	12.6 U!	12.6U!

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ANALYSES
851107
                                                        NON PRIORITY POLLUTANTS
                                                           U - NOT DETECTED, VALUE SHOWN IS MINIMUM QUANTIIFIABLE LIMIT
                  EAGLE HARBOR SURVEY                      M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
          4/17-18/84   SEDIMENTS / TISSUE                  K - MULTIPLY VALUE SHOWN BY 1,000
             5/07/84        SEDIMENTS                   ANALYSIS CODES: (INDICATE LAB PERFORMING ANBALYSIS)
                                                           P-PEDCO, S-S CUBED, M-MEAD COMPU CHEM, W-WEST COAST TECHNICAL
                                                        DEPTH IS IN FEET

                                                                              CARBON            4-METHYL
                                                                     2-BUTA   DISUL-   2-HEX    2-PENTAN           VINYL
STATION DESCRIPTION      DEP ANALY                                   NONE     FIDE     ANONE    ONE      STYRENE  ACETATE  O-XYLENE
                          TH  SIS  M NUM    DATE   TIME ACETONE
------------------------ --- ----- - ------ ------ ---- --------- -------- -------- -------- -------- -------- -------- -------- --------
LOCATION 1                5    P   S J4601  840417 1215 143     M!417    U!83     U!417    U!417    U!417    U!417    U!417    U!        !
LOCATION 1A               0    M   S J4638  840418 1240 70      U!140    U!7      U!70     U!70     U!3. 5   U!7      U!3. 5   U!        !
LOCATION 2                5    P   S J4613  840418 0930 31. 9 M-!476  U--!95  U---!476U----!476U----!476U----!476U----!476U----!---------!
LOCATION 3                5    P   S J4602  840417 1233 2583    M!7000   U!1400   U!7000   U!7000   U!7000   U!7000   U!7000   U!        !
LOCATION 4               04    P   S J4614  840418 0942 18. 6 M-!333  U--!66. 6 U-!333U----!333U----!333U----!333U----!333U----!---------!
LOCATION 5                5    P   S J4603  840417 1254 638      !476    U!95     U!476U----!476U----!476U----!476U----!476U----!---------!
LOCATION 6               60    P   S J4604  840417 1303 454     M!417    U!83     U!417U----!417U----!417U----!417U----!417U----!---------!
LOCATION 7                0    P   S J4620  840417 1015 1319    -!8.6  K--!476  U--!13.3K---!476U----!476U----!476U----!476U----!---------!
LOCATION 8                5    P   S J4615  840418 0953 56  M---!500  U--!100  U--!500U----!500U----!500U----!500U----!500U----!---------!
LOCATION 9                2    P   S J4605  840417 1312 87. 4  M!526    U!105    U!526U----!526U----!526U----!526U----!526U----!---------!
LOCATION 10              35    P   S J4606  840417 1327 83. 3  M!370    U!74     U!370U----!370U----!370U----!370U----!370U----!---------!
LOCATION 11               0    S   S J4621  840417 1045 5.7  U--!5.7  U--!1  M----!5.7U----!5.7U----!5.7U----!5.7U----!5.7U----!---------!
LOCATION 12              40    P   S J4607  840417 1336 52   M--!667   U-!133   U-!667U----!667U----!667U----!667U----!667U----!---------!
LOCATION 13               0    S   S J4622  840417 1145 13. 2 M-!7.8  U--!1. 6 U--!7.8U----!7.8U----!7.8U----!7.8U----!7.8U----!---------!
LOCATION 14               3    P   S J4616  840418 1001 141  M--!454. 5 U!90. 9 U-!454.5U--!454.5U--!49.5M---!454.5U--!514-----!---------!
LOCATION 15              12    P   S J4612  840417 1607 68  M---!357  U--!71. 4 U-!357 U---!4. 6M---!357 U---!357 U---!357 U---! --------!
LOCATION 16              35    P   S J4611  840417 1558 91. 7 M-!333  U--!66. 6 U-!333  U--!10  M---!333  U--!333  U--!333  U--! --------!
LOCATION 17              54    P   S J4610  840417 1532 96  M---!357  U--!71   U---!357U----!357U----!357U----!357U----!357U----!---------!
LOCATION 18              50    P   S J4609  840417 1520 24  M---!233  U--!46   U---!233U----!233U----!233U----!233U----!233U----!---------!
LOCATION 19              45    P   S J4608  840417 1505 244  U--!244  U--!49   U---!244U----!244U----!244U----!244U----!244U----!---------!
LOCATION 20               3    P   S J4617 •840418 1011 101. 5 M!256  U--!51. 3 U-!256U----!256U----!256U----!256U----!9.7M----!---------!
LOCATION 21              35    P   S J4618  840418 1029 127  M--!5.6  M--!35   U---!175U----!175U----!6.1M----!175U----!175U----!---------!
LOCATION 22              38    P   S J4619  840418 1040 172  U--!3.6  M--!17   M---!172U----!172U----!6M------!172U----!172U----!---------!
LOCATION 23              45    S   S J4630  840418 1230 8.8 U---!8.8 U---!1. 76M--!8.8U----!8.8U----!8.8U----!8.8U----!8.8U----!---------!
LOCATION 24              33    M   S J4631  840418 1247 60      U!120    U!6      U!60     U!60     U!3      U!6      U!3      U!        !
LOCATION 25              25    S   S J4623  840417 1210 6.5  U--!6.5  U--!1. 3 U--!6.5U----!6.5U----!6.5U----!6.5U----!6.5U----!---------!
LOCATION 26              35    S   S J4627  840418 1051 78. 4  C!12. 6  U!2. 5  M-!12.6U---!12.6U---!12.6U---!12.6U---!12.6U---!---------!
LOCATION 27              30    S   S J4628  840418 1107 59. 9M--!13 U----!2.7U----!13U-----!13U-----!13U-----!13U-----!13U-----!---------!
LOCATION 28              34    S   S J4629  840418 1116 79. 5C--!11. 6U--!1. 55M--!11.6U---!11.6U---!11.6U---!11.6U---!11.6U---!---------!
LOCATION 29              35    M   S J4632  840418 1305 57      U!114    U!5. 7   U!57     U!57     U!2. 8   U!5. 7   U!2. 8   U!        !
LOCATION 30              40    M   S J4633  840418 1320 100     U!200    U!10     U!100    U!100    U!5      U!10     U!5      U!        !
LOCATION 31              35    M   S J4634  840418 1341 90      U!180    U!9      U!90     U!90     U!4. 5   U!9      U!4. 5   U!        !
LOCATION 32               0    S   S J4624  840417 1415 22  M---!6.3  U--!1. 3 U--!6.3U----!6.3U----!6.3U----!6.3U----!6.3U----!---------!
LOCATION 33              40    M   S J4637  840418 1439 100     U!200    U!10     U!100    U!100    U!5      U!10     U!5      U!        !
LOCATION 34               0    S   S J4625  840417 1240 7  U----!7  U----!1. 4 U--!7U------!7U------!7U------!7U------!7U------!---------!
LOCATION 36              40    I   S J4641  840419 1014 140     M!111    U!11     U!11     U!11     U!11     U!11     U!11     U!        !
LOCATION 37              10    M   S J4640  840419 1008 100     U!200    U!10     U!100    U!100    U!5      U!10     U!5      U!        !
LOCATION 38              24    I   S J4643  840419 1043 95      M!78     U!7. 8   U!7. 8   U!7. 8   U!7. 8   U!7. 8   U!7. 8   U!        !
LOCATION 39              40    I   S J4642  840419 1026 488      !122    U!12     U!12     U!12     U!12     U!12     U!12     U!        !
LOCATION 40               4    I   S J4644  840419 1052 96      U!96     U!9. 6   U!9. 6   U!9. 6   U!9. 6   U!9. 6   U!9. 6   U!        !
LOCATION 41               0    S   S J4626  840417 1320 826     C!6.3  U--!1. 3 M--!6.3U----!6.3U----!6.3U----!6.3U----!6.3U----!---------!
LOCATION 42              10    I   S J4645  840419 1102 217     M!72     U!7. 2   U!7. 2   U!7. 2   U!7. 2   U!7. 2   U!7. 2   U!        !
LOCATION 43              33    I   S J4646  840419 1109 383     M!106    U!10. 6  U!10. 6  U!10. 6  U!10. 6  U!10. 6  U!10. 6  U!        !
LOCATION 44              29    I   S J4649  840419 1221 460     M!100    U!10     U!10     U!10     U!10     U!10     U!10     U!        !
LOCATION 45               6    I   S J4648  840419 1214 112     M!71     U!7. 1   U!7. 1   U!7. 1   U!7. 1   U!7. 1   U!7. 1   U!        !
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ANALYSES
851107

EAGLE HARBOR SURVEY
4/17-18/84 SEDIMENTS / TISSUE
5/07/84 SEDIMENTS

NON PRIORITY POLLUTANTS
U - NOT DETECTED, VALUE SHOWN IS MINIMUM DETECTION LIMIT
M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
K - MULTIPLY VALUE SHOWN BY 1,000
ANALYSIS CODES:
P - PEDCO, S - S CUBED, M- MEAD COMPU CHEM, W - WEST COAST TEC
DEPTH IS IN FEET

STATION DESCRIPTION	DEPTH	ANALYSIS	M	NUM	DATE	TIME	ACETONE	2-BUTANONE	CARBON DISUL-FIDE	2-HEXANONE	4-METHYL 2-PENTANONE	STYRENE	VINYL ACETATE	O-XYLENE		
LOCATION 46	4	I	S	J4647	840419	1210	74	U!74	U!7. 4	U!7. 4	U!7. 4	U!7. 4	U!7. 4	U!7. 4	U!	!
LOCATION 48	35	M	S	J4636	840418	1417	90	U!180	U!9	U!90	U!90	U!4. 5	U!9	U!4. 5	U!	!
LOCATION 49	35	M	S	J4639	840419	0956	100	U!200	U!10	U!100	U!100	U!5	U!10	U!5	U!	!
LOCATION 50	32	M	S	J4635	840418	1406	90	U!180	U!9	U!90	U!90	U!4. 5	U!9	U!4. 5	U!	!
LOCATION 51	45	I	S	J4650	840419	1252	327	M!126	U!12. 6	U!12. 6	U!12. 6	U!12. 6	U!12. 6	U!12. 6	U!	!

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ANALYSES
851107
                                                             NON-PRIORITY POLLUTANTS
                                                               U - NOT DETECTED, VALUE SHOWN IS MINIMUM DETECTION LIMIT
                          EAGLE HARBOR SURVEY                  M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
                    4/17-18/84    SEDIMENTS / TISSUE           K - MULTIPLY VALUE SHOWN BY 1,000
                       5/07/84        SEDIMENTS              ANALYSIS CODES:
                                                               P - PEDCO, S - S CUBED, M- MEAD COMPU CHEM, W - WEST COAST TEC
                                                             DEPTH IS IN FEET

                                                                                 2,4,5
                                                                                 TRI                                                   2-METHYL
                              DEP ANALY                       BENZOIC  2-METHYL 4-METHYL CHLORO             BENZYL   4-CHLORO DIBENZO  NAPHTH-
STATION DESCRIPTION            TH  SIS  M NUM    DATE   TIME ACID     PHENOL   PHENOL   PHENOL   ANILINE  ALCOHOL  ANILINE  FURAN    ALENE
------------------------ --- ----- - ------ ------ ---- -------- -------- -------- -------- -------- -------- -------- -------- --------
LOCATION 1                     5    P   S J4601  840417 1215 400000 U!20000  U!400000 U!20000  U!417    U!1667   U!2083   U!833    U!1667   U!
LOCATION 1A                    0    M   S J4638  840418 1240   5700 U!570    U!570    U!5700   U!570    U!1140   U!2850   U!570    U!1140   U!
LOCATION 2                     5    P   S J4613  840418 0930   9524 U-!476  U--!476  U--!9524U---!476U----!1905U---!2381U---!952U----!1905U---!
LOCATION 3                     5    P   S J4602  840417 1233 171429 U!8571   U!8571   U!17143  U!357    U!1429   U!1786   U!714    U!1429   U!
LOCATION 4                    04    P   S J4614  840418 0942   6667 U-!333  U--!333  U--!6667U---!333U----!1333U---!1667U---!666U----!1333U---!
LOCATION 5                     5    P   S J4603  840417 1254   9524 U!476    U!476    U!9524U---!476U----!1905U---!2381U---!952U----!1905U---!
LOCATION 6                    60    P   S J4604  840417 1303   8333 U!417    U!417    U!8333U---!417U----!1667U---!2083U---!833U----!1667U---!
LOCATION 7                     0    P   S J4620  840417 1015   9524 U-!476  U--!476  U--!9524U---!476U----!1905U---!2381U---!952U----!1905U---!
LOCATION 8                     5    P   S J4615  840418 0953  10000 U!500   U--!500  U--!10000U--!500U----!2000U---!2500U---!1000U---!2000U---!
LOCATION 9                     2    P   S J4605  840417 1312  10526 U!526    U!526    U!10526U--!526U----!2105U---!2632U---!1053U---!2105U---!
LOCATION 10                   35    P   S J4606  840417 1327   7407 U!370    U!370    U!7407U---!370U----!1481U---!1852U---!741U----!1481U---!
LOCATION 11                    0    S   S J4621  840417 1045   2545 M-!127  U--!127  M--!2545U---!127U----!508U----!1272U---!254U----!508U----!
LOCATION 12                   40    P   S J4607  840417 1336  13333 U!667   U-!667   U-!13333U--!667U----!2667U---!3333U---!1333U---!2667U---!
LOCATION 13                    0    S   S J4622  840417 1145   3592 U-!179  U--!179  U--!3592U---!179U----!718U----!1796U---!359M----!718U----!
LOCATION 14                    3    P   S J4616  840418 1001   9090 U-!454. 5 U!454. 5 U!9090U---!454.5U--!1818U---!2273U---!13955---!35773---!
LOCATION 15                   12    P   S J4612  840417 1607   7143 U-!357  U--!357  U--!7143 U--!357 U---!1428 U--!1786 U--!714 U---!1428 U--!
LOCATION 16                   35    P   S J4611  840417 1558   6667 U-!333  U--!333  U--!6667  U-!333  U--!1333  U-!1667  U-!666  U--!1333 U--!
LOCATION 17                   54    P   S J4610  840417 1532   7143 U-!357  U--!357  U--!7143U---!357U----!1429U---!1786U---!714U----!1429U---!
LOCATION 18                   50    P   S J4609  840417 1520   4651 U-!233  U--!233  U--!4651U---!233U----!930U----!1163U---!465U----!930U----!
LOCATION 19                   45    P   S J4608  840417 1505   4878 U-!244  U--!244  U--!4878U---!244U----!976U----!1219U---!488U----!976U----!
LOCATION 20                    3    P   S J4617  840418 1011   5128 U-!256  U--!256  U--!5128U---!256U----!1026U---!1282U---!513U----!1026----!
LOCATION 21                   35    P   S J4618  840418 1029   3509 U-!175  U--!175  U--!3509U---!175U----!702U----!877U----!137.8M--!702U----!
LOCATION 22                   38    P   S J4619  840418 1040   3448 U-!172  U--!172  U--!3448U---!172U----!690U----!862U----!345U----!690U----!
LOCATION 23                   45    S   S J4630  840418 1230   3500M--!175 U---!175 M---!3500U---!175U----!700U----!1750U---!575M----!700M----!
LOCATION 24                   33    M   S J4631  840418 1247   4700 U!470    U!470    U!4700   U!470    U!940    U!2350   U!470    U!940    U!
LOCATION 25                   25    S   S J4623  840417 1210   3550 U-!177  U--!177  U--!3550U---!177U----!710U----!1775U---!355U----!710U----!
LOCATION 26                   35    S   S J4627  840418 1051 116472 U!5823   U!5823   U!116472U-!5823U---!23294U--!58236U--!11647U--!23294U--!
LOCATION 27                   30    S   S J4628  840418 1107   7567M--!378 U---!378U----!7567U---!378U----!1513U---!3784U---!756M----!1513M---!
LOCATION 28                   34    S   S J4629  840418 1116  80275 U-!4013 U--!4013 U--!80275---!4013U---!16055U--!40137U--!64000---!16055M--!
LOCATION 29                   35    M   S J4632  840418 1305   4600 U!460    U!460    U!4600   U!460    U!920    U!2300   U!460    U!920    U!
LOCATION 30                   40    M   S J4633  840418 1320   8600 U!860    U!860    U!8600   U!860    U!1220   U!4300   U!860    M!4720   U!
LOCATION 31                   35    M   S J4634  840418 1341   7000 U!700    U!700    U!7000   U!700    U!1400   U!3500   U!700    U!1400   U!
LOCATION 32                    0    S   S J4624  840417 1415   2692 U-!135  U--!135  U--!2692U---!135U----!538U----!1346U---!269U----!538U----!
LOCATION 33                   40    M   S J4637  840418 1439   7760 U!776    U!776    U!7760   U!776    U!1552   U!3880   U!776    U!1552   U!
LOCATION 34                    0    S   S J4625  840417 1240   3221 M-!161  U--!161  U--!3221U---!161U----!644U----!1610U---!322M----!644U----!
LOCATION 36                   40    I   S J4641  840419 1014    444 U!444    U!444    U! 444   U!444    U!444    U!444    U!444    U!444    U!
LOCATION 37                   10    M   S J4640  840419 1008   7720 U!772    U!772    U!7720   U!772    U!1544   U!3860   U!772    U!1544   U!
LOCATION 38                   24    I   S J4643  840419 1043    313 U!313    U!313    U! 313   U!313    U!313    U!313    U!313    U!313    U!
LOCATION 39                   40    I   S J4642  840419 1026    488 U!488    U!488    U! 488   U!488    U!488    U!488    U!488    U!488    U!
LOCATION 40                    4    I   S J4644  840419 1052    385 U!385    U!385    U! 385   U!385    U!385    U!385    U!385    U!385    U!
LOCATION 41                    0    S   S J4626  840417 1320   2304 M!115   U--!160  M--!2304U---!115U----!461U----!1152U---!230M----!461U----!
LOCATION 42                   10    I   S J4645  840419 1102    290 U!290    U!290    U! 290   U!290    U!290    U!290    U!290    U!290    U!
LOCATION 43                   33    I   S J4646  840419 1109    425 U!425    U!425    U! 425   U!425    U!425    U!425    U!425    U!425    U!
LOCATION 44                   29    I   S J4649  840419 1221    400 U!400    U!400    U! 400   U!400    U!400    U!400    U!400    U!400    U!
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ANALYSES
851107
                                                              NON-PRIORITY POLLUTANTS
                                                                U - NOT DETECTED, VALUE SHOWN IS MINIMUM DETECTION LIMIT
                   EAGLE HARBOR SURVEY                          M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
            4/17-18/84   SEDIMENTS / TISSUE                     K - MULTIPLY VALUE SHOWN BY 1,000
                5/07/84       SEDIMENTS                       ANALYSIS CODES:
                                                                P - PEDCO, S - S CUBED, M- MEAD COMPU CHEM, W - WEST COAST TEC
                                                              DEPTH IS IN FEET

                                                                                  2,4,5
                                                                                  TRI                                                 2-METHYL
                          DEP ANALY                                BENZOIC 2-METHYL 4-METHYL CHLORO            BENZYL   4-CHLORO DIBENZO  NAPHTH-
STATION DESCRIPTION        TH  SIS  M NUM     DATE   TIME ACID    PHENOL   PHENOL   PHENOL   ANILINE  ALCOHOL  ANILINE  FURAN    ALENE
------------------------- --- ----- - ------ ------ ---- -------- -------- -------- -------- -------- -------- -------- -------- --------
LOCATION 45                 6   I   S J4648  840419 1214      286 U!286    U!286    U! 286   U!286    U!286    U!286    U!286    U!286    U!
LOCATION 46                 4   I   S J4647  840419 1210      294 U!294    U!294    U! 294   U!294    U!294    U!294    U!294    U!294    U!
LOCATION 48                35   M   S J4636  840418 1417     7250 U!725    U!725    U!7250   U!725    U!1450   U!3625   U!725    U!1450   U!
LOCATION 49                35   M   S J4639  840419 0956     7200 U!720    U!720    U!7200   U!720    U!1440   U!3600   U!720    U!1440   U!
LOCATION 50                32   M   S J4635  840418 1406     7100 U!710    U!710    U!7100   U!710    U!1420   U!3550   U!710    U!1420   U!
LOCATION 51                45   I   S J4650  840419 1252    12500 U!12500  U!12500  U!12500  U!12500  U!12500  U!12500  U!12500  U!12500  U!
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ANALYSES
851107
                                                            NON PRIORITY POLLUTANTS
                                                              U - NOT DETECTED, VALUE SHOWN IS MINIMUM DETECTION LIMIT
                         EAGLE HARBOR SURVEY                  M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
                  4/17-18/84   SEDIMENTS / TISSUE             K - MULTIPLY VALUE SHOWN BY 1,000
                     5/07/84       SEDIMENTS                ANALYSIS CODES:
                                       *                      P - PEDCO, S - S CUBED, M- MEAD COMPU CHEM, W - WEST COAST TEC
                                                            DEPTH IS IN FEET

                          DEP ANALY                         2-NITRO  3-NITRO  4-NITRO
STATION DESCRIPTION        TH  SIS  M NUM    DATE   TIME ANILINE  ANILINE  ANILINE
-------- ----------- ---- ----- - ------ ------ ---- -------- -------- -------- -------- -------- -------- -------- -------- --------
LOCATION 1                  5    P  S J4601  840417 1215   8333  U!  8333  U!  8333  U!        !        !        !        !        !        !
LOCATION 1A                 0    M  S J4638  840418 1240   5700  U!  5700  U!  5700  U!        !        !        !        !        !        !
LOCATION 2                  5    P  S J4613  840418 0930   9524 U-!  9524 U-!  9524 U-!--------!--------!--------!--------!--------!--------!
LOCATION 3                  5    P  S J4602  840417 1233   7143  U!  7143  U!  7143  U!--------!--------!--------!--------!--------!--------!
LOCATION 4                 04    P  S J4614  840418 0942   6667 U-!  6667 U-!  6667 U-!--------!--------!--------!--------!--------!--------!
LOCATION 5                  5    P  S J4603  840417 1254   9524  U!  9524  U!  9524  U!--------!--------!--------!--------!--------!--------!
LOCATION 6                 60    P  S J4604  840417 1303   8333  U!  8333  U!  8333  U!--------!--------!--------!--------!--------!--------!
LOCATION 7                  0    P  S J4620  840417 1015   9524 U-!  9524 U-!  9524 U-!--------!--------!--------!--------!--------!--------!
LOCATION 8                  5    P  S J4615  840418 0953  10000  U!10000  U!10000  U!--------!--------!--------!--------!--------!--------!
LOCATION 9                  2    P  S J4605  840417 1312  10526  U!10526  U!10526  U!--------!--------!--------!--------!--------!--------!
LOCATION 10                35    P  S J4606  840417 1327   7407  U!  7407  U!  7407  U!--------!--------!--------!--------!--------!--------!
LOCATION 11                 0    S  S J4621  840417 1045   2545 U-!  2545 U-!  2545 U-!--------!--------!--------!--------!--------!--------!
LOCATION 12                40    P  S J4607  840417 1336  13333  U!13333  U!13333  U!--------!--------!--------!--------!--------!--------!
LOCATION 13                 0    S  S J4622  840417 1145   3592 U-!  3592 U-!  3592 U-!--------!--------!--------!--------!--------!--------!
LOCATION 14                 3    P  S J4616  840418 1001   9090 U-!  9090 U-!  9090 U-!--------!--------!--------!--------!--------!--------!
LOCATION 15                12    P  S J4612  840417 1607   7143 U-!  7143 U-!  7143 U-!--------!--------!--------!--------!--------!--------!
LOCATION 16                35    P  S J4611  840417 1558   6667 U-!  6667 U-!  6667 U-! -------! -------! -------! -------! -------! -------!
LOCATION 17                54    P  S J4610  840417 1532   7143 U-!  7143 U-!  7143 U-!        !        !        !        !        !        !
LOCATION 18                50    P  S J4609  840417 1520   4651 U-!  4651 U-!  4651 U-!--------!--------!--------!--------!--------!--------!
LOCATION 19                45    P  S J4608  840417 1505   4878 U-!  4878 U-!  4878 U-!--------!--------!--------!--------!--------!--------!
LOCATION 20                 3    P  S J4617  840418 1011   5128 U-!  5128 U-!  5128 U-!--------!--------!--------!--------!--------!--------!
LOCATION 21                35    P  S J4618  840418 1029   3509 U-!  3509 U-!  3509 U-!--------!--------!--------!--------!--------!--------!
LOCATION 22                38    P  S J4619  840418 1040   3448 U-!  3448 U-!  3448 U-!--------!--------!--------!--------!--------!--------!
LOCATION 23                45    S  S J4630  840418 1230   3500U--!  3500U--!  3500U--!--------!--------!--------!--------!--------!--------!
LOCATION 24                33    M  S J4631  840418 1247   4700  U!  4700  U!  4700  U!        !        !        !        !        !        !
LOCATION 25                25    S  S J4623  840417 1210   3550 U-!  3550 U-!  3550 U-!--------!--------!--------!--------!--------!--------!
LOCATION 26                35    S  S J4627  840418 1051 116472 U!116472 U!116472 U!--------!--------!--------!--------!--------!--------!
LOCATION 27                30    S  S J4628  840418 1107   7567U--!  7567U--!  7567U--!--------!--------!--------!--------!--------!--------!
LOCATION 28                34    S  S J4629  840418 1116  80275 U-!80275 U-!80275 U-!--------!--------!--------!--------!--------!--------!
LOCATION 29                35    M  S J4632  840418 1305   4600  U!  4600  U!  4600  U!        !        !        !        !        !        !
LOCATION 30                40    M  S J4633  840418 1320   8600  U!  8600  U!  8600  U!        !        !        !        !        !        !
LOCATION 31                35    M  S J4634  840418 1341   7000  U!  7000  U!  7000  U!        !        !        !        !        !        !
LOCATION 32                 0    S  S J4624  840417 1415   2692 U-!  2692 U-!  2692 U-!--------!--------!--------!--------!--------!--------!
LOCATION 33                40    M  S J4637  840418 1439   7760  U!  7760  U!  7760  U!        !        !        !        !        !        !
LOCATION 34                 0    S  S J4625  840417 1240   3221 U-!  3221 U-!  3221 U-!--------!--------!--------!--------!--------!--------!
LOCATION 36                40    I  S J4641  840419 1014    444  U!   444  U!   444  U!        !        !        !        !        !        !
LOCATION 37                10    M  S J4640  840419 1008   7720  U!  7720  U!  7720  U!        !        !        !        !        !        !
LOCATION 38                24    I  S J4643  840419 1043    313  U!   313  U!   313  U!        !        !        !        !        !        !
LOCATION 39                40    I  S J4642  840419 1026    488  U!   488  U!   488  U!        !        !        !        !        !        !
LOCATION 40                 4    I  S J4644  840419 1052    385  U!   385  U!   385  U!        !        !        !        !        !        !
LOCATION 41                 0    S  S J4626  840417 1320   2304  U!  2304  U!  2304  U!--------!--------!--------!--------!--------!--------!
LOCATION 42                10    I  S J4645  840419 1102    290  U!   290  U!   290  U!        !        !        !        !        !        !
LOCATION 43                33    I  S J4646  840419 1109    425  U!   425  U!   425  U!        !        !        !        !        !        !
LOCATION 44                29    I  S J4649  840419 1221    400  U!   400  U!   400  U!        !        !        !        !        !        !
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ANALYSES
851107
                                                            NON PRIORITY POLLUTANTS
                                                              U - NOT DETECTED, VALUE SHOWN IS MINIMUM DETECTION LIMIT
                    EAGLE HARBOR SURVEY                       M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
              4/17-18/84   SEDIMENTS / TISSUE                 K - MULTIPLY VALUE SHOWN BY 1,000
                 5/07/84       SEDIMENTS                    ANALYSIS CODES:
                                                              P - PEDCO, S - S CUBED, M- MEAD COMPU CHEM, W - WEST COAST TEC
                                                            DEPTH IS IN FEET

                                                   2-NITRO  3-NITRO  4-NITRO
                        DEP ANALY                                         
STATION DESCRIPTION      TH  SIS  M NUM   DATE  TIME ANILINE  ANILINE  ANILINE  _______ _______ _______ _______ _______ _______
-----------------------  ---  ---- - ----- ------ ---- -------- -------- --------
LOCATION 45               6    I  S J4648 840419 1214   286  U!  286  U!  286  U!       !       !       !       !       !       !
LOCATION 46               4    I  S J4647 840419 1210   294  U!  294  U!  294  U!       !       !       !       !       !       !
LOCATION 48              35    M  S J4636 840418 1417  7250  U! 7250  U! 7250  U!       !       !       !       !       !       !
LOCATION 49              35    M  S J4639 840419 0956  7200  U! 7200  U! 7200  U!       !       !       !       !       !       !
LOCATION 50              32    M  S J4635 840418 1406  7100  U! 7100  U! 7100  U!       !       !       !       !       !       !
LOCATION 51              45    I  S J4650 840419 1252 12500  U!12500  U!12500  U!       !       !       !       !       !       !
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APPENDIX E

SUMMARY TABLE OF DETECTED VALUES

INORGANICS -- METALS
851107

EAGLE HARBOR SURVEY
4/17-18/84 SEDIMENTS / TISSUE
5/07/84 SEDIMENTS

VALUE CODES: UNITS: MG/KG (PPM) DRY WEIGHT
U - NOT DETECTED, VALUE SHOWN IS MINIMUM QUANTIFIABLE LIMIT
M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
K - MULTIPLY VALUE SHOWN BY 1,000
ANALYSIS CODES: ALL METALS ANALYSIS PERFORMED AT ROCKY MOUNTAIN
CODES APPLY TO ORGANICS ANALYSIS ONLY
DEPTH IS IN FEET

							METALS PARAMETERS							
STATION DESCRIPTION	DEPTH	ANALYSIS	M	ITR NUM	DATE	TIME	AL	CR	BA	BE	CO	CU	FE	NI
LOCATION 1	5	P	S	MJ2301	840417	1215	4190	10	5.7		3.2	4	5970	10
LOCATION 1A	0	M	S	MJ2331	840418	1240	7000	22	12		5.9	9.3	10900	21
LOCATION 2	5	P	S	MJ2313	840418	0930	3950	12	5.5		3.7	4.2	7120	14
LOCATION 3	5	P	S	MJ2302	840417	1233	3490	10			2.7	3.5	5210	9.6
LOCATION 4	04	P	S	MJ2314	840418	0942	5080	15	6.3		4.1	5.0	7660	16
LOCATION 5	5	P	S	MJ2303	840417	1254	3480	10	5.1		2.7	4.1	5260	10
LOCATION 6	60	P	S	MJ2304	840417	1303	5140	15	8.3		0.19	11	8300	15
LOCATION 7	0		S	MJ2344	840507	1330	3020	6.7				3.2	5550	7.1
LOCATION 8	5	P	S	MJ2315	840418	0953	4720	15	9.2		3.8	6.4	7470	16
LOCATION 9	2	P	S	MJ2305	840417	1312	3400	10	7.1		2.7	3.5	4980	9.1
LOCATION 10	35	P	S	MJ2306	840417	1327	5590	17	9.7		0.28	14	8950	16
LOCATION 11	0		S	MJ2345	840507	1345	2680	7.0	9.5			3.4	3950	6.9
LOCATION 12	40	P	S	MJ2307	840417	1336	6540	20	6.7		6.4	11	12500	20
LOCATION 13	13		S	MJ2346	840507	1417	4220	13	11		3.4	8.3	6800	12
LOCATION 14	3	P	S	MJ2316	840418	1001	4270	14	6.9		3.7	5.8	6840	16
LOCATION 15	12	P	S	MJ2312	840417	1607	5810	19	9.2		5.2	13	9570	19
LOCATION 16	35	P	S	MJ2311	840417	1558	5650	16	9.9		4.3	14	8520	17
LOCATION 17	54	P	S	MJ2310	840417	1532	9050	28	23		7.2	51	15000	25
LOCATION 18	50	P	S	MJ2309	840417	1520	8200	25	18		6.2	33	12700	22
LOCATION 19	45	P	S	MJ2308	840417	1505	4600	13	13		3.4	19	7540	11
LOCATION 20	3	P	S	MJ2317	840418	1011	9540	32	23		8.0	34	15500	34
LOCATION 21	35	P	S	MJ2318	840418	1029	11000	34	30	0.27	7.6	80	17600	28
LOCATION 22	38	P	S	MJ2319	840418	1040	11500	36	28	0.28	8.1	80	18400	30
LOCATION 23	45	S	S	MJ2323	840418	1230	7750	23	19		6.0	32	13000	21
LOCATION 24	33	M	S	MJ2324	840418	1247	6780	21	15		5.0	25	10500	18
LOCATION 25	0		S	MJ2347	840507	1407	5550	13	11		4.1	8.2	8220	15
LOCATION 26	35	S	S	MJ2320	840418	1051	13400	40	37	0.31	9.1	83	20900	34
LOCATION 27	30	S	S	MJ2321	840418	1107	12400	39	33	0.31	8.7	80	20400	32
LOCATION 28	34	S	S	MJ2322	840418	1116	11600	35	32	0.27	7.8	69	18600	29
LOCATION 29	35	M	S	MJ2325	840418	1305	11500	36	29	0.28	8.3	66	18300	30
LOCATION 30	40	M	S	MJ2326	840418	1320	9620	29	27		7.1	54	15400	29
LOCATION 31	35	M	S	MJ2327	840418	1341	6170	17	22		6.2	68	10000	15
LOCATION 32	0		S	MJ2348	840507	1505	6080	18	18		5.0	20	9370	19
LOCATION 33	40	M	S	MJ2330	840418	1439	10200	34	30	0.26	7.3	67	16700	27
LOCATION 34	0		S	MJ2349	840507	1430	4560	17	31		3.9	28	8340	18
LOCATION 36	40	I	S	MJ2334	840419	1014	9990	34	30		7.0	210	16100	26
LOCATION 37	10	M	S	MJ2333	840419	1008	5530	42	71		4.7	118	12200	21
LOCATION 38	24	I	S	MJ2336	840419	1043	4430	13	12		3.3	22	7200	11
LOCATION 39	40	I	S	MJ2335	840419	1026	11900	38	42	0.28	8.5	161	20800	31
LOCATION 40	4	I	S	MJ2337	840419	1052	7640	26	31		5.8	141	11600	23
LOCATION 41	0		S	MJ2350	840507	1445	5940	20	20		4.5	92	10100	18
LOCATION 42	10	I	S	MJ2338	840419	1102	4360	12	12		3.1	21	7890	12
LOCATION 43	33	I	S	MJ2339	840419	1109	9110	30	31		6.5	75	15000	24
LOCATION 44	29	I	S	MJ2342	840419	1221	9060	31	35		6.5	80	15500	24

INORGANICS -- METALS
851107

EAGLE HARBOR SURVEY
4/17-18/84 SEDIMENTS / TISSUE
5/07/84 SEDIMENTS

VALUE CODES: UNITS: MG/KG (PPM) DRY WEIGHT
U - NOT DETECTED, VALUE SHOWN IS MINIMUM QUANTIFIABLE LIMIT
M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
K - MULTIPLY VALUE SHOWN BY 1,000
ANALYSIS CODES: ALL METALS ANALYSIS PERFORMED AT ROCKY MOUNTAIN
CODES APPLY TO ORGANICS ANALYSIS ONLY
DEPTH IS IN FEET

							METALS PARAMETERS							
STATION DESCRIPTION	DEPTH	ANALYSIS	M	ITR NUM	DATE	TIME	AL	CR	BA	BE	CO	CU	FE	NI
LOCATION 45	6	I	S	MJ2341	840419	1214	3400 !	8.3 !	7.2 !	!	!	5.4!	4690 !	6.0 !
LOCATION 46	4	I	S	MJ2340	840419	1210	3440 !	8.7 !	7.1 !	!	2.6 !	8.3!	5760 !	8.3 !
LOCATION 48	35	M	S	MJ2329	840418	1417	9950 !	32 !	26 !	0.26 !	7.2 !	70 !	16200 !	26 !
LOCATION 49	35	M	S	MJ2332	840419	0956	5840 !	17 !	15 !	!	4.4 !	30 !	8790 !	15 !
LOCATION 50	32	M	S	MJ2328	840418	1406	8520 !	26 !	23 !	!	5.8 !	52 !	13100 !	21 !
LOCATION 51	45	I	S	MJ2343	840419	1252	8570 !	29 !	35 !	!	6.2 !	111 !	14600 !	23 !

INORGANICS -- METALS
851107

EAGLE HARBOR SURVEY
4/17-18/84 SEDIMENTS / TISSUE
5/07/84 SEDIMENTS

VALUE CODES: UNITS: MG/KG (PPM) DRY WEIGHT
U - NOT DETECTED, VALUE SHOWN IS MINIMUM QUANTIFIABLE LIMIT
M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
K - MULTIPLY VALUE SHOWN BY 1,000
ANALYSIS CODES: ALL METALS ANALYSIS PERFORMED AT ROCKY MOUNTAIN
CODES APPLY TO ORGANICS ANALYSIS ONLY
DEPTH IS IN FEET

							METALS PARAMETERS							
STATION DESCRIPTION	DEPTH	ANALYSIS	M	ITR NUM	DATE	TIME	MN	ZN	B	V	AG	AS	SB	SE
LOCATION 1	5	P	S	MJ2301	840417	1215	77	15		14		6.4		
LOCATION 1A	0	M	S	MJ2331	840418	1240	134	37		29		9.7		
LOCATION 2	5	P	S	MJ2313	840418	0930	125	19		15		5.8		
LOCATION 3	5	P	S	MJ2302	840417	1233	69	14		12		5.5		
LOCATION 4	04	P	S	MJ2314	840418	0942	106	19		19		7.0		
LOCATION 5	5	P	S	MJ2303	840417	1254	71	13		13		5.7		
LOCATION 6	60	P	S	MJ2304	840417	1303	115	25		17		8.8		
LOCATION 7	0		S	MJ2344	840507	1330	120	13		12		4.2		
LOCATION 8	5	P	S	MJ2315	840418	0953	89	24		16		6.9		
LOCATION 9	2	P	S	MJ2305	840417	1312	75	12		12		5.9		
LOCATION 10	35	P	S	MJ2306	840417	1327	112	29		19		7.5		
LOCATION 11	0		S	MJ2345	840507	1345	100	11		9.5		3.8		
LOCATION 12	40	P	S	MJ2307	840417	1336	145	27		25		5.8		
LOCATION 13	13		S	MJ2346	840507	1417	97	23		16		5.1		
LOCATION 14	3	P	S	MJ2316	840418	1001	90	18		15		5.9		
LOCATION 15	12	P	S	MJ2312	840417	1607	125	28		22		8.0		
LOCATION 16	35	P	S	MJ2311	840417	1558	105	29		20		5.0		
LOCATION 17	54	P	S	MJ2310	840417	1532	158	67		32		13		
LOCATION 18	50	P	S	MJ2309	840417	1520	137	49		28		6.6		
LOCATION 19	45	P	S	MJ2308	840417	1505	79	32		16		7.4		
LOCATION 20	3	P	S	MJ2317	840418	1011	162	56		34		16		
LOCATION 21	35	P	S	MJ2318	840418	1029	180	94		40	0.57	14		
LOCATION 22	38	P	S	MJ2319	840418	1040	191	92		41	0.67	11		
LOCATION 23	45	S	S	MJ2323	840418	1230	153	48		28		7.2		
LOCATION 24	33	M	S	MJ2324	840418	1247	117	40		23		7.6		
LOCATION 25	0		S	MJ2347	840507	1407	114	27		19		6.9		
LOCATION 26	35	S	S	MJ2320	840418	1051	209	106		46	0.66	15		
LOCATION 27	30	S	S	MJ2321	840418	1107	196	100		46	0.86	13		
LOCATION 28	34	S	S	MJ2322	840418	1116	190	88		39	0.58	9.5		
LOCATION 29	35	M	S	MJ2325	840418	1305	191	85		39		12		
LOCATION 30	40	M	S	MJ2326	840418	1320	164	67		32		10		
LOCATION 31	35	M	S	MJ2327	840418	1341	156	252		22	0.79	42	1.5	
LOCATION 32	0		S	MJ2348	840507	1505	112	32		20		10		
LOCATION 33	40	M	S	MJ2330	840418	1439	170	79		36		12		
LOCATION 34	0		S	MJ2349	840507	1430	85	79		18		6.1		
LOCATION 36	40	I	S	MJ2334	840419	1014	161	101		34		10		
LOCATION 37	10	M	S	MJ2333	840419	1008	100	218		29		10		
LOCATION 38	24	I	S	MJ2336	840419	1043	77	29		15		7.9		
LOCATION 39	40	I	S	MJ2335	840419	1026	189	144		41	0.65	22		
LOCATION 40	4	I	S	MJ2337	840419	1052	109	82		26		6.9		
LOCATION 41	0		S	MJ2350	840507	1445	107	52		20		8.0		
LOCATION 42	10	I	S	MJ2338	840419	1102	77	32		14		7.6		
LOCATION 43	33	I	S	MJ2339	840419	1109	146	75		32	0.57	9.3		
LOCATION 44	29	I	S	MJ2342	840419	1221	146	76		31	0.68	11		

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INORGANICS -- METALS
851107

EAGLE HARBOR SURVEY
4/17-18/84 SEDIMENTS / TISSUE
5/07/84 SEDIMENTS

VALUE CODES: UNITS: MG/KG (PPM) DRY WEIGHT
U - NOT DETECTED, VALUE SHOWN IS MINIMUM QUANTIFIABLE LIMIT
M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
K - MULTIPLY VALUE SHOWN BY 1,000
ANALYSIS CODES: ALL METALS ANALYSIS PERFORMED AT ROCKY MOUNTAIN
CODES APPLY TO ORGANICS ANALYSIS ONLY
DEPTH IS IN FEET

							METALS PARAMETERS							
STATION DESCRIPTION	DEPTH	ANALYSIS	M	ITR NUM	DATE	TIME	MN	ZN	B	V	AG	AS	SB	SE
LOCATION 45	6	I	S	MJ2341	840419	1214	63	14		11		4.9		
LOCATION 46	4	I	S	MJ2340	840419	1210	76	18		11		5.5		
LOCATION 48	35	M	S	MJ2329	840418	1417	155	77		34	0.51	9.1		
LOCATION 49	35	M	S	MJ2332	840419	0956	107	50		20		5.5		
LOCATION 50	32	M	S	MJ2328	840418	1406	133	61		28		7.2		
LOCATION 51	45	I	S	MJ2343	840419	1252	137	74		30	0.52	9.5		

INORGANICS -- METALS
851107

EAGLE HARBOR SURVEY
4/17-18/84 SEDIMENTS / TISSUE
5/07/84 SEDIMENTS

VALUE CODES: UNITS: MG/KG (PPM) DRY WEIGHT
U - NOT DETECTED, VALUE SHOWN IS MINIMUM QUANTIFIABLE LIMIT
M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
K - MULTIPLY VALUE SHOWN BY 1,000
ANALYSIS CODES: ALL METALS ANALYSIS PERFORMED AT ROCKY MOUNTAIN
CODES APPLY TO ORGANICS ANALYSIS ONLY
DEPTH IS IN FEET

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							METALS PARAMETERS						
STATION DESCRIPTION	DEPTH	ANALYSIS	M	ITR NUM	DATE	TIME	TL	HG	SN	CD	PB	PHENOLIC	CN
LOCATION 1	5	P	S	MJ2301	840417	1215				.14	4.3		
LOCATION 1A	0	M	S	MJ2331	840418	1240				0.12	6.6		
LOCATION 2	5	P	S	MJ2313	840418	0930				0.12	5.0		
LOCATION 3	5	P	S	MJ2302	840417	1233				.14	3.7		
LOCATION 4	04	P	S	MJ2314	840418	0942				0.14	4.6		
LOCATION 5	5	P	S	MJ2303	840417	1254				.085	3.0		
LOCATION 6	60	P	S	MJ2304	840417	1303				0.19	7.6		
LOCATION 7	0		S	MJ2344	840507	1330					2.9		
LOCATION 8	5	P	S	MJ2315	840418	0953		0.12		0.34	4.5		
LOCATION 9	2	P	S	MJ2305	840417	1312				0.085	2.7		
LOCATION 10	35	P	S	MJ2306	840417	1327		0.12		0.28	9.8		
LOCATION 11	0		S	MJ2345	840507	1345		0.17	3.0	0.06	2.4		
LOCATION 12	40	P	S	MJ2307	840417	1336				0.05	9.1		
LOCATION 13	13		S	MJ2346	840507	1417			2.1	0.14	7.8		
LOCATION 14	3	P	S	MJ2316	840418	1001				0.16	3.7		
LOCATION 15	12	P	S	MJ2312	840417	1607		0.1		0.16	8.6		
LOCATION 16	35	P	S	MJ2311	840417	1558		0.1		0.72	9.3		
LOCATION 17	54	P	S	MJ2310	840417	1532		0.36		0.56	29		
LOCATION 18	50	P	S	MJ2309	840417	1520		0.26	1.1	0.66	19		
LOCATION 19	45	P	S	MJ2308	840417	1505		0.22	2.1	0.38	14		
LOCATION 20	3	P	S	MJ2317	840418	1011		0.14	2.0	0.46	16		
LOCATION 21	35	P	S	MJ2318	840418	1029		0.79	2.3	1.1	50		
LOCATION 22	38	P	S	MJ2319	840418	1040		0.70	2.1	1.0	51		
LOCATION 23	45	S	S	MJ2323	840418	1230		0.28		0.42	23		
LOCATION 24	33	M	S	MJ2324	840418	1247		0.26		0.60	18		
LOCATION 25	0		S	MJ2347	840507	1407		0.20	2.3	0.10	12		
LOCATION 26	35	S	S	MJ2320	840418	1051		0.66	1.8	1.5	63		
LOCATION 27	30	S	S	MJ2321	840418	1107		0.56	2.9	1.3	55		
LOCATION 28	34	S	S	MJ2322	840418	1116		0.68	2.4	0.84	47		
LOCATION 29	35	M	S	MJ2325	840418	1305		0.53		0.94	43		
LOCATION 30	40	M	S	MJ2326	840418	1320		0.39		0.76	38		
LOCATION 31	35	M	S	MJ2327	840418	1341		0.27	2.9	0.89	202		
LOCATION 32	0		S	MJ2348	840507	1505		0.16	2.0	0.16	15		
LOCATION 33	40	M	S	MJ2330	840418	1439		0.56	2.0	0.8	54		
LOCATION 34	0		S	MJ2349	840507	1430		0.20	2.7	0.26	66		
LOCATION 36	40	I	S	MJ2334	840419	1014		0.88	1.3	0.92	55		
LOCATION 37	10	M	S	MJ2333	840419	1008		4.7	7.5	1.4	173		
LOCATION 38	24	I	S	MJ2336	840419	1043		0.30		0.56	15		
LOCATION 39	40	I	S	MJ2335	840419	1026		1.1	1.9	0.94	114		
LOCATION 40	4	I	S	MJ2337	840419	1052		1.3	2.9	0.28	97		
LOCATION 41	0		S	MJ2350	840507	1445		1.3	2.6	0.12	60		
LOCATION 42	10	I	S	MJ2338	840419	1102		0.22		0.52	17		
LOCATION 43	33	I	S	MJ2339	840419	1109		0.78		0.67	46		
LOCATION 44	29	I	S	MJ2342	840419	1221		0.78	1.6	0.64	52		

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INORGANICS -- METALS
851107
                                                              VALUE CODES:                         UNITS: MG/KG (PPM) DRY WEIGHT
                                                                U - NOT DETECTED, VALUE SHOWN IS MINIMUM QUANTIFIABLE LIMIT
                         EAGLE HARBOR SURVEY                    M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
                4/17-18/84   SEDIMENTS / TISSUE                 K - MULTIPLY VALUE SHOWN BY 1,000
                   5/07/84       SEDIMENTS                    ANALYSIS CODES: ALL METALS ANALYSIS PERFORMED AT ROCKY MOUNTAIN
                                                                CODES APPLY TO ORGANICS ANALYSIS ONLY
                                                              DEPTH IS IN FEET

                           DEP ANALY   ITR                ---- M E T A L S   P A R A M E T E R S ----
STATION DESCRIPTION         TH  SIS  M NUM     DATE  TIME    TL       HG        SN       CD        PB    PHENOLIC    CN
------------------------   --- ----- - ------ ------ ----  -------- -------- -------- -------- -------- -------- --------
LOCATION 45                  6    I  S MJ2341 840419 1214          !        !        ! 0.08   !  14    !        !        !
LOCATION 46                  4    I  S MJ2340 840419 1210          !        !        ! 0.20   !   7.1  !        !        !
LOCATION 48                 35    M  S MJ2329 840418 1417          ! 0.52   !        ! 0.84   !  42    !        !        !
LOCATION 49                 35    M  S MJ2332 840419 0956          ! 0.22   !        ! 0.39   !  22    !        !        !
LOCATION 50                 32    M  S MJ2328 840418 1406          ! 0.44   !   1.5  ! 0.70   !  33    !        !        !
LOCATION 51                 45    I  S MJ2343 840419 1252          ! 0.84   !   2.6  ! 0.70   !  50    !        !        !
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ORGANIC ANALYSES
851107

EAGLE HARBOR SURVEY
4/17-18/84 SEDIMENTS / TISSUE
5/07/84 SEDIMENTS

VALUE CODES: UNITS: UG/KG (PPB) DRY WEIGHT
U - NOT DETECTED, VALUE SHOWN IS MINIMUM QUANTIFIABLE LIMIT
M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
K - MULTIPLY VALUE SHOWN BY 1,000
ANALYSIS CODES: (INDICATE LAB PERFORMING ANALYSIS)
P-PEDCO, S-S CUBED, M-MEAD COMPU CHEM, W-WEST COAST TECHNICAL
DEPTH IS IN FEET

```
                                                   ------------------- A C I D   C O M P O U N D S -------------------
                                                   2,4,6     P-
                                                   TRI       CHLORO    2-        2,4,DI    2,4,DI    2-        4-        2,4,DI
                         DEP ANALY   OTR                     CHLORO    -M-       CHLORO    CHLORO    METHYL    NITRO     NITRO     NITRO
STATION DESCRIPTION       TH  SIS  M NUM     DATE   TIME PHENOL    CRESOL    PHENOL    PHENOL    PHENOL    PHENOL    PHENOL    PHENOL
------------------------ --- ----- - ------ ------ ---- -------- -------- -------- -------- -------- -------- -------- --------
LOCATION 14               3    P   S J4616  840418 1001          ! 15455  !        !        !        !        !        !        !
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ORGANIC ANALYSES
851107
                                                                  VALUE CODES:                       UNITS: UG/KG (PPB) DRY WEIGHT
                                                                     U - NOT DETECTED, VALUE SHOWN IS MINIMUM QUANTIFIABLE LIMIT
                       EAGLE HARBOR SURVEY                           M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
                  4/17-18/84   SEDIMENTS / TISSUE                    K - MULTIPLY VALUE SHOWN BY 1,000
                     5/07/84       SEDIMENTS                      ANALYSIS CODES: (INDICATE LAB PERFORMING ANALYSIS)
                                                                     P-PEDCO, S-S CUBED, M-MEAD COMPU CHEM, W-WEST COAST TECHNICAL
                                                                  DEPTH IS IN FEET

                                                    -------------------- A C I D   C O M P O U N D S --------------------
                                                    4,6,DI   PENTA
                        DEP ANALY   OTR                     NITRO    CHLORO
STATION DESCRIPTION      TH  SIS  M NUM     DATE  TIME PHENOL   PHENOL   PHENOL
----------------------  ---  ----- - ------  ------ ---- -------- -------- --------
LOCATION 1               5    P   S J4601  840417 1215          !        !608333  !
LOCATION 11              0    S   S J4621  840417 1045          !        !    254 M!
LOCATION 13              0    S   S J4622  840417 1145          !        !    359 M!
LOCATION 41              0    S   S J4626  840417 1320          !        !    230 M!
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ORGANIC ANALYSES
851107

EAGLE HARBOR SURVEY
4/17-18/84 SEDIMENTS / TISSUE
5/07/84 SEDIMENTS

VALUE CODES: UNITS: UG/KG (PPB) DRY WEIGHT
U - NOT DETECTED, VALUE SHOWN IS MINIMUM QUANTIFIABLE LIMIT
M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
K - MULTIPLY VALUE SHOWN BY 1,000
ANALYSIS CODES: (INDICATE LAB PERFORMING ANALYSIS)
P-PEDCO, S-S CUBED, M-MEAD COMPU CHEM, W-WEST COAST TECHNICAL
DEPTH IS IN FEET

							P E S T I C I D E S							
STATION DESCRIPTION	DEP TH	ANALY SIS	M	OTR NUM	DATE	TIME	ALDRIN	DIELDRIN	CHLOR- DANE	4,4'- DDT	4,4'- DDE	4,4'- DDD	A-ENDO SULFAN	B-ENDO SULFAN
LOCATION 14	3	P	S	J4616	840418	1001	0.45 M							
LOCATION 16	35	P	S	J4611	840417	1558	3.3 M							
LOCATION 20	3	P	S	J4617	840418	1011	5.4 M							
LOCATION 21	35	P	S	J4618	840418	1029	3.7 M							
LOCATION 37	10	M	S	J4640	840419	1008					32 M			

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ORGANIC ANALYSES
851107
                                                                   ANALYSES:  SEDIMENT:  * MEAD COMPU CHEM
                                                                              TISSUE:    WASHINGTON DEPT OF ECOLOGY - MANCHESTER
                               EAGLE HARBOR SURVEY                 +  APPLIES TO BASE/NEUTRALS & TENTATIVES
                    4/17-18/84   SEDIMENTS / TISSUE                U  NOT DETECTED -- VALUE SHOWN IS MINIMUM DETECTION LIMIT
                       5/07/84      SEDIMENTS                      M  COMPOUND PRESENT BUT BELOW MINIMUM DETECTION LIMIT SHOWN
                                                                   UNITS:  UG/KG (PPB) DRY WEIGHT BASIS

                         DEP ANALY   LAB                ---------------------------- PCB ---------------------------- TOXA-    TCDD
STATION DESCRIPTION       TH  SIS  M NUM     DATE  TIME PCB-1242 PCB-1254 PCB-1221 PCB-1232 PCB-1248 PCB-1260 PCB-1016 PHENE    DIOXIN
----------------------- --- ----- - ------ ------ ---- -------- -------- -------- -------- -------- -------- -------- -------- --------
LOCATION 5                5   P    S J4603  840417 1254        !        !        !        !        !        !3809     !        !        !
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ORGANIC ANALYSES
851107

EAGLE HARBOR SURVEY
4/17-18/84 SEDIMENTS / TISSUE
5/07/84 SEDIMENTS

VALUE CODES: UNITS ARE UG/KG (PPB) DRY WEIGHT
U - NOT DETECTED, VALUE SHOWN IS MINIMUM DETECTION LIMIT
M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
K - MULTIPLY VALUE SHOWN BY 1,000
ANALYSIS CODES:
P - PEDCO, S - S CUBED, M- MEAD COMPU CHEM, W - WEST COAST TEC
DEPTH IS IN FEET

							B A S E / N E U T R A L S								
STATION DESCRIPTION	DEPTH	ANALYSIS	M	QTR NUM	DATE	TIME	ACENAPHTHENE	BENZIDINE	1,2,4-TRICHLOR BENZENE	HEXA CHLORO BENZENE	HEXA CHLORO ETHANE	BIS 2-CHLORO EHTYL) ETHER	2-CHLORO NAPHTHALENE	1,2-DI CHLORO BENZENE	1,3-DI CHLORO BENZENE
LOCATION 13	0	S	S	J4622	840417	1145	359 M								
LOCATION 14	3	P	S	J4616	840418	1001	11227			1705 M					
LOCATION 23	45	S	S	J4630	840418	1230	446 M								
LOCATION 26	35	S	S	J4627	840418	1051	11.6KM								
LOCATION 27	30	S	S	J4628	840418	1107	756 M								
LOCATION 28	34	S	S	J4629	840418	1116	83.6 K								
LOCATION 34	0	S	S	J4625	840417	1240	322 M								
LOCATION 51	45	I	S	J4650	840419	1252	13250 M								

ORGANIC ANALYSES
851107

EAGLE HARBOR SURVEY
4/17-18/84 SEDIMENTS / TISSUE
5/07/84 SEDIMENTS

VALUE CODES: UNITS ARE UG/KG (PPB) DRY WEIGHT
U - NOT DETECTED, VALUE SHOWN IS MINIMUM DETECTION LIMIT
M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
K - MULTIPLY VALUE SHOWN BY 1,000
ANALYSIS CODES:
P - PEDCO, S - S CUBED, M- MEAD COMPU CHEM, W - WEST COAST TEC
DEPTH IS IN FEET

							BASE / NEUTRALS								
STATION DESCRIPTION	DEPTH	ANALYSIS	M	OTR NUM	DATE	TIME	1,4-DI CHLORO BENZENE	3,3'-DICHLORO BENZIDINE	2,4-DINITRO TOLUENE	2,6-DINITRO TOLUENE	1,2-DI PHENYLHYDRAZAINE	FLUOR ANTHENE	4-CHLORO PHENYL PHENYL ETHER	4-BROMO PHENYL PHENYL ETHER	BIS(2-CHLOROISO PROPYL) ETHER
LOCATION 1	5	P	S	J4601	840417	1215		4208					2867 M		
LOCATION 1A	0	M	S	J4638	840418	1240						570 M			
LOCATION 3	5	P	S	J4602	840417	1233		3607 M					2457 M		
LOCATION 4	04	P	S	J4614	840418	0942									1333
LOCATION 10	35	P	S	J4606	840417	1327		9333				1678 M	11407		
LOCATION 12	40	P	S	J4607	840417	1336		6733 M					4587 M		
LOCATION 13	0	S	S	J4622	840417	1145						565 M			
LOCATION 14	3	P	S	J4616	840418	1001			11864			2373 M			
LOCATION 15	12	P	S	J4612	840417	1607		2564				6143			
LOCATION 18	50	P	S	J4609	840417	1520		1126 M				1830 M			
LOCATION 19	45	P	S	J4608	840417	1505						948 M			
LOCATION 20	3	P	S	J4617	840418	1011		1923 M				13795			
LOCATION 22	38	P	S	J4619	840418	1040		1897				1897			
LOCATION 23	45	S	S	J4630	840418	1230						3910			
LOCATION 24	33	M	S	J4631	840418	1247						550 M			
LOCATION 25	25	S	S	J4623	840417	1210						355 M			
LOCATION 26	35	S	S	J4627	840418	1051					58.2KM	67.3 K	11.6KM	11.6KM	
LOCATION 27	30	S	S	J4628	840418	1107						47.8 K			
LOCATION 28	34	S	S	J4629	840418	1116					58.2KM	8.0KM			
LOCATION 29	35	M	S	J4632	840418	1305						480 M			
LOCATION 30	40	M	S	J4633	840418	1320						9100			
LOCATION 32	0	S	S	J4624	840417	1415						269 M			
LOCATION 33	40	M	S	J4637	840418	1439						840 M			
LOCATION 34	0	S	S	J4625	840417	1240						1320 M			
LOCATION 36	40	I	S	J4641	840419	1014						2200 M			
LOCATION 37	10	M	S	J4640	840419	1008						6400			
LOCATION 38	24	I	S	J4643	840419	1043						360 M			
LOCATION 39	40	I	S	J4642	840419	1026						43920			
LOCATION 40	4	I	S	J4644	840419	1052						1154 M			
LOCATION 41	0	S	S	J4626	840417	1320						230 M			
LOCATION 43	33	I	S	J4646	840419	1109						511 M			
LOCATION 44	29	I	S	J4649	840419	1221						560 M			
LOCATION 48	35	M	S	J4636	840418	1417						1000 M			
LOCATION 49	35	M	S	J4639	840419	0956						720 M			
LOCATION 50	32	M	S	J4635	840418	1406						710 M			
LOCATION 51	45	I	S	J4650	840419	1252						102500			

ORGANIC ANALYSES
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EAGLE HARBOR SURVEY
4/17-18/84 SEDIMENTS / TISSUE
5/07/84 SEDIMENTS

VALUE CODES: UNITS ARE UG/KG (PPB) DRY WEIGHT
U - NOT DETECTED, VALUE SHOWN IS MINIMUM DETECTION LIMIT
M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
K - MULTIPLY VALUE SHOWN BY 1,000
ANALYSIS CODES:
P - PEDCO, S - S CUBED, M- MEAD COMPU CHEM, W - WEST COAST TEC
DEPTH IS IN FEET

STATION DESCRIPTION	DEPTH	ANALYSIS	M	OTR NUM	DATE	TIME	BASE / NEUTRALS								
							BIS 2-CHLORO ETHOXY METHANE	HEXA CHLORO BUTA DIENE	HEXA CHLOROCY CLOPENT ADIENE	ISO PHORONE	NAPH THALENE	NITRO BENZENE	N-NITROSO DIMETHYL AMINE	N-NITROSO DIPHENYL AMINE	N-NITROSO DIPROPYL AMINE
LOCATION 1	5	P	S	J4601	840417	1215				29625				13666	
LOCATION 3	5	P	S	J4602	840417	1233								25643	
LOCATION 4	04	P	S	J4614	840418	0942	1333								
LOCATION 7	0	P	S	J4620	840417	1015								5714	
LOCATION 10	35	P	S	J4606	840417	1327								4926	
LOCATION 12	40	P	S	J4607	840417	1336								5047 M	
LOCATION 13	0	S	S	J4622	840417	1145					359 M				
LOCATION 14	3	P	S	J4616	840418	1001					27182			5000	
LOCATION 20	3	P	S	J4617	840418	1011					1277 M			5282	
LOCATION 21	35	P	S	J4618	840418	1029					244 M			465 M	
LOCATION 22	38	P	S	J4619	840418	1040					417 M			2000	
LOCATION 23	45	S	S	J4630	840418	1230					599 M			350 M	
LOCATION 27	30	S	S	J4628	840418	1107					756 M				
LOCATION 28	34	S	S	J4629	840418	1116					50.6 K			8 KM	
LOCATION 30	40	M	S	J4633	840418	1320					930 M				
LOCATION 34	0	S	S	J4625	840417	1240					322 M				
LOCATION 41	0	S	S	J4626	840417	1320					230 M				

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EAGLE HARBOR SURVEY
4/17-18/84 SEDIMENTS / TISSUE
5/07/84 SEDIMENTS

VALUE CODES: UNITS ARE UG/KG (PPB) DRY WEIGHT
U - NOT DETECTED, VALUE SHOWN IS MINIMUM DETECTION LIMIT
M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
K - MULTIPLY VALUE SHOWN BY 1,000
ANALYSIS CODES:
P - PEDCO, S - S CUBED, M- MEAD COMPU CHEM, W - WEST COAST TEC
DEPTH IS IN FEET

							BASE / NEUTRALS								
STATION DESCRIPTION	DEPTH	ANALYSIS	M	OTR NUM	DATE	TIME	BIS 2-ETHYL HEXYL PHTHALAT	BENZYL BUTYL PHTHALAT	DI-N-BUTYL PHTHALAT	DI-N-OCTYL PHTHALAT	DIETHYL PHTHALAT	DIMETHYL PHTHALAT	BENZO A ANTHRACENE	BENZO A PYRENE	BENZO B FLUORANTHENE
LOCATION 5	5	P	S	J4603	840417	1254				14048					
LOCATION 10	35	P	S	J4606	840417	1327			2581 M		4629		778 M		
LOCATION 11	0	S	S	J4621	840417	1045	3540 M		254 M		254 M				
LOCATION 12	40	P	S	J4607	840417	1336	7200	8400	2587 M	23867	6267				
LOCATION 13	0	S	S	J4622	840417	1145	359 M		359 M		359 M		359 M	718 M	718 M
LOCATION 15	12	P	S	J4612	840417	1607							3500 M		
LOCATION 19	45	P	S	J4608	840417	1505	5878						912 M		
LOCATION 20	3	P	S	J4617	840418	1011						1574 M	3949	1821 M	
LOCATION 21	35	P	S	J4618	840418	1029								8789	
LOCATION 22	38	P	S	J4619	840418	1040							2397	1879 M	
LOCATION 23	45	S	S	J4630	840418	1230			350 M				1760	2170 M	4990
LOCATION 25	25	S	S	J4623	840417	1210	355 M		355 M		355 M		355 M	710 M	710 M
LOCATION 26	35	S	S	J4627	840418	1051			11.6KM				28.4KM	23.3KM	32.9KM
LOCATION 27	30	S	S	J4628	840418	1107							41.3 K	9.8 K	29.5 K
LOCATION 28	34	S	S	J4629	840418	1116			8 KM				21.1KM	16.1KM	16.1KM
LOCATION 29	35	M	S	J4632	840418	1305							560 M		1100 M
LOCATION 30	40	M	S	J4633	840418	1320							2400 M	1720 M	2800 M
LOCATION 31	35	M	S	J4634	840418	1341									1400 M
LOCATION 32	0	S	S	J4624	840417	1415	269 M		269 M		269 M		538 M		538 M
LOCATION 33	40	M	S	J4637	840418	1439							840 M	1552 M	3500 M
LOCATION 34	0	S	S	J4625	840417	1240	322 M				322 M		491 M	644 M	899 M
LOCATION 36	40	I	S	J4641	840419	1014							910 M	2180 M	1700 M
LOCATION 37	10	M	S	J4640	840419	1008	772 M						2800 M	1544 M	7600
LOCATION 39	40	I	S	J4642	840419	1026							14640	19032	20252
LOCATION 40	4	I	S	J4644	840419	1052								1230 M	1080 M
LOCATION 41	0	S	S	J4626	840417	1320	230 M						230 M	461 M	461 M
LOCATION 43	33	I	S	J4646	840419	1109								980 M	830 M
LOCATION 44	29	I	S	J4649	840419	1221								660 M	1040 M
LOCATION 48	35	M	S	J4636	840418	1417							1200 M	1450 M	3000 M
LOCATION 49	35	M	S	J4639	840419	0956							720 M		1440 M
LOCATION 50	32	M	S	J4635	840418	1406							710 M		1420 M

ORGANIC ANALYSES
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EAGLE HARBOR SURVEY
4/17-18/84 SEDIMENTS / TISSUE
5/07/84 SEDIMENTS

VALUE CODES: UNITS ARE UG/KG (PPB) DRY WEIGHT
U - NOT DETECTED, VALUE SHOWN IS MINIMUM DETECTION LIMIT
M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
K - MULTIPLY VALUE SHOWN BY 1,000
ANALYSIS CODES:
P - PEDCO, S - S CUBED, M- MEAD COMPU CHEM, W - WEST COAST TEC
DEPTH IS IN FEET

							BASE / NEUTRALS								
STATION DESCRIPTION	DEPTH	ANALYSIS	M	OTR NUM	DATE	TIME	BENZO K FLUORANTHENE	CHRYSENE	ACENAPHTHYLENE	ANTHRACENE	BENZO GHI PERYLENE	FLUORENE	PHENANTHRENE	DIBENZO A,H ANTHRACENE	INDENO 1,2,3-CD PYRENE
LOCATION 4	04	P	S	J4614	840418	0942					1333				
LOCATION 6	60	P	S	J4604	840417	1303							1117 M		
LOCATION 7	0	P	S	J4620	840417	1015							2619 M		
LOCATION 10	35	P	S	J4606	840417	1327		1563 M		2159 M			2000 M		2663 M
LOCATION 12	40	P	S	J4607	840417	1336				3073 M			2753 M		
LOCATION 13	0	S	S	J4622	840417	1145	718 M	718 M		359 M		359 M	359 M		
LOCATION 14	3	P	S	J4616	840418	1001				2595 M	2477 M		3609 M		2382 M
LOCATION 15	12	P	S	J4612	840417	1607	5136	4714		1686			2039		
LOCATION 18	50	P	S	J4609	840417	1520	2239 M	2419 M		2170 M			1405 M		
LOCATION 19	45	P	S	J4608	840417	1505		749 M		1256 M			990 M		
LOCATION 20	3	P	S	J4617	840418	1011	3841 M	5333		10615		1231 M	14923		
LOCATION 21	35	P	S	J4618	840418	1029		12544		5114	847 M		6368	665 M	970 M
LOCATION 22	38	P	S	J4619	840418	1040	1252 M	2776 M		3207 M			4032		583 M
LOCATION 23	45	S	S	J4630	840418	1230		1920 M	350 M	2190	1000 M	693 M	3340	700 M	901 M
LOCATION 24	33	M	S	J4631	840418	1247		470 M		470 M			470 M		
LOCATION 25	25	S	S	J4623	840417	1210	710 M	710 M		355 M		355 M	355 M		
LOCATION 26	35	S	S	J4627	840418	1051		33 KM	11.6KM	11.6KM	23.3KM	11.6KM	11.6KM		
LOCATION 27	30	S	S	J4628	840418	1107		22.6 K	756 M	6590	4540 M	945 M	8810	2730 M	4590 M
LOCATION 28	34	S	S	J4629	840418	1116		16.1KM	8 KM	28 KM		77.9 K	200 K		
LOCATION 29	35	M	S	J4632	840418	1305	1100 M	640 M		460 M			460 M		
LOCATION 30	40	M	S	J4633	840418	1320		3000 M		8900		910 M	3300 M		
LOCATION 31	35	M	S	J4634	840418	1341		700 M							
LOCATION 32	0	S	S	J4624	840417	1415		538 M					269 M		
LOCATION 33	40	M	S	J4637	840418	1439		1700 M		776 M			776 M		
LOCATION 34	0	S	S	J4625	840417	1240		836 M		322 M		322 M	491 M		644 M
LOCATION 36	40	I	S	J4641	840419	1014		1890 M					1200 M		
LOCATION 37	10	M	S	J4640	840419	1008	7600	2900 M		1200 M			1900 M		
LOCATION 39	40	I	S	J4642	840419	1026		17080	1781 M	10248	4148	1635 M	7808		4636
LOCATION 40	4	I	S	J4644	840419	1052		1596 M					558 M		
LOCATION 41	0	S	S	J4626	840417	1320		461 M		230 M			230 M		461 M
LOCATION 43	33	I	S	J4646	840419	1109		915 M							
LOCATION 44	29	I	S	J4649	840419	1221		760 M							
LOCATION 48	35	M	S	J4636	840418	1417		1800 M		725 M	1450 M		725 M		1450 M
LOCATION 49	35	M	S	J4639	840419	0956		720 M							
LOCATION 50	32	M	S	J4635	840418	1406		900 M					710 M		
LOCATION 51	45	I	S	J4650	840419	1252		37500 M		15500 M			32500 M		

ORGANIC ANALYSES
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EAGLE HARBOR SURVEY
4/17-18/84 SEDIMENTS / TISSUE
5/07/84 SEDIMENTS

VALUE CODES: UNITS ARE UG/KG (PPB) DRY WEIGHT
U - NOT DETECTED, VALUE SHOWN IS MINIMUM DETECTION LIMIT
M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
K - MULTIPLY VALUE SHOWN BY 1,000
ANALYSIS CODES:
P - PEDCO, S - S CUBED, M- MEAD COMPU CHEM, W - WEST COAST TEC
DEPTH IS IN FEET

							B A S E / N E U T R A L S			
STATION DESCRIPTION	DEP TH	ANALY SIS	M	OTR NUM	DATE	TIME	PYRENE	BENZO(A)ANTHRACENE/ CHRYSENE	TOTAL PNA DETECTION LIMIT	/ TOTAL PNA'S/ DETECTED
LOCATION 1	5	P	S	J4601	840417	1215			20000	0
LOCATION 1A	0	M	S	J4638	840418	1240	570 M		11400	1140
LOCATION 2	5	P	S	J4613	840418	0930			21903	0
LOCATION 3	5	P	S	J4602	840417	1233			17144	0
LOCATION 4	04	P	S	J4614	840418	0942			15325	0
LOCATION 5	5	P	S	J4603	840417	1254			21903	0
LOCATION 6	60	P	S	J4604	840417	1303			18333	1117
LOCATION 7	0	P	S	J4620	840417	1015			20951	2619
LOCATION 8	5	P	S	J4615	840418	0953			23000	0
LOCATION 9	2	P	S	J4605	840417	1312			23160	0
LOCATION 10	35	P	S	J4606	840417	1327	1589 M		10369	12430
LOCATION 11	0	S	S	J4621	840417	1045			5842	0
LOCATION 12	40	P	S	J4607	840417	1336			28000	5826
LOCATION 13	0	S	S	J4622	840417	1145	397 M		2513	5988
LOCATION 14	3	P	S	J4616	840418	1001	2559 M		11817	54404
LOCATION 15	12	P	S	J4612	840417	1607	4843		8568	28061
LOCATION 16	35	P	S	J4611	840417	1558			15325	0
LOCATION 17	54	P	S	J4610	840417	1532			16429	0
LOCATION 18	50	P	S	J4609	840417	1520	1909 M		6045	11972
LOCATION 19	45	P	S	J4608	840417	1505	866 M		7808	5721
LOCATION 20	3	P	S	J4617	840418	1011	11128		4104	67913
LOCATION 21	35	P	S	J4618	840418	1029	12730		3159	48271
LOCATION 22	38	P	S	J4619	840418	1040	7897		2415	26337
LOCATION 23	45	S	S	J4630	840418	1230	6760		700	31729
LOCATION 24	33	M	S	J4631	840418	1247	470 M		7990	2430
LOCATION 25	25	S	S	J4623	840417	1210	355 M		3195	4970
LOCATION 26	35	S	S	J4627	840418	1051	65.6K		81529	332023
LOCATION 27	30	S	S	J4628	840418	1107	61.7K		1513	243143
LOCATION 28	34	S	S	J4629	840418	1116	69.7K		64220	595119
LOCATION 29	35	M	S	J4632	840418	1305	970 M		5520	5770
LOCATION 30	40	M	S	J4633	840418	1320	7800		8560	40860
LOCATION 31	35	M	S	J4634	840418	1341	700 M		12600	2800
LOCATION 32	0	S	S	J4624	840417	1415	269 M		4035	2421
LOCATION 33	40	M	S	J4637	840418	1439	2900 M		9312	12884
LOCATION 34	0	S	S	J4625	840417	1240	994 M		2254	7607
LOCATION 36	40	I	S	J4641	840419	1014	2150 M		3996	12230
LOCATION 37	10	M	S	J4640	840419	1008	8600		7720	40544
LOCATION 38	24	I	S	J4643	840419	1043	453 M		4382	813
LOCATION 39	40	I	S	J4642	840419	1026	36600		1952	181780
LOCATION 40	4	I	S	J4644	840419	1052	1170 M		3850	6788
LOCATION 41	0	S	S	J4626	840417	1320	230 M		2073	3224
LOCATION 42	10	I	S	J4645	840419	1102			4640	0
LOCATION 43	33	I	S	J4646	840419	1109	800 M		4675	4036
LOCATION 44	29	I	S	J4649	840419	1221	1120 M		4400	4140

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ORGANIC ANALYSES
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                                                          VALUE CODES:                UNITS ARE UG/KG (PPB) DRY WEIGHT
                                                            U - NOT DETECTED, VALUE SHOWN IS MINIMUM DETECTION LIMIT
                      EAGLE HARBOR SURVEY                   M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
                4/17-18/84   SEDIMENTS / TISSUE             K - MULTIPLY VALUE SHOWN BY 1,000
                   5/07/84      SEDIMENTS                 ANALYSIS CODES:
                                                            P - PEDCO, S - S CUBED, M- MEAD COMPU CHEM, W - WEST COAST TEC
                                                          DEPTH IS IN FEET
                                                  ------------------------ B A S E  /  N E U T R A L S -------------------------
                            DEP ANALY   OTR                        BENZO(A)ANTHRACENE/        TOTAL PNA     / TOTAL PNA'S/
STATION DESCRIPTION          TH  SIS  M NUM     DATE  TIME PYRENE  CHRYSENE                DETECTION LIMIT      DETECTED
-------------------------  --- -----  - ------ ------ ---- -------  ---------------------   ---------------  ------------
LOCATION 45                  6    I   S J4648 840419 1214         !                      !            4576  !           0  !
LOCATION 46                  4    I   S J4647 840419 1210         !                      !            4704  !           0  !
LOCATION 48                 35    M   S J4636 840418 1417   2100 M!                      !            5800  !       14900  !
LOCATION 49                 35    M   S J4639 840419 0956    750 M!                      !           11520  !        4350  !
LOCATION 50                 32    M   S J4635 840418 1406    950 M!                      !           10650  !        5400  !
LOCATION 51                 45    I   S J4650 840419 1252 82500   !                      !          100000  !      308750  !
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ORGANIC ANALYSES
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EAGLE HARBOR SURVEY
4/17-18/84 SEDIMENTS / TISSUE
5/07/84 SEDIMENTS

VALUE CODES: UNITS: UG/KG (PPB) DRY WEIGHT
U - NOT DETECTED, VALUE SHOWN IS MINIMUM QUANTIIFIABLE LIMIT
M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
K - MULTIPLY VALUE SHOWN BY 1,000
ANALYSIS CODES: (INDICATE LAB PERFORMING ANBALYSIS)
P-PEDCO, S-S CUBED, M-MEAD COMPU CHEM, W-WEST COAST TECHNICAL
DEPTH IS IN FEET

							VOLATILES								
STATION DESCRIPTION	DEPTH	ANALYSIS	M	OTR NUM	DATE	TIME	1,1,2,2-TETRA CHLORO ETHANE	CHLORO ETHANE	2-CHLORO ETHYL VINLY ETHER	CHLORO FORM	1,1-DICHLORO ETHENE	TRANS-1,2-DICHLORO ETHENE	1,2-DICHLORO PROPANE	TRANS-1,3-DICHLORO PROPENE	CIS-1,3-DICHLORO PROPENE
LOCATION 7	0	P	S	J4620	840417	1015			8.6K						
LOCATION 9	2	P	S	J4605	840417	1312							105		

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ORGANIC ANALYSES
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EAGLE HARBOR SURVEY
4/17-18/84 SEDIMENTS / TISSUE
5/07/84 SEDIMENTS

VALUE CODES: UNITS: UG/KG (PPB) DRY WEIGHT
U - NOT DETECTED, VALUE SHOWN IS MINIMUM QUANTIIFIABLE LIMIT
M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
K - MULTIPLY VALUE SHOWN BY 1,000
ANALYSIS CODES: (INDICATE LAB PERFORMING ANBALYSIS)
P-PEDCO, S-S CUBED, M-MEAD COMPU CHEM, W-WEST COAST TECHNICAL
DEPTH IS IN FEET

STATION DESCRIPTION	DEP TH	ANALY SIS	M	OTR NUM	DATE	TIME	VOLATILES ETHYL BENZENE	METHYL LENE CHLORIDE	CHLORO METHANE	BROMO METHANE	BROMO FORM	BROMO DICHLORO METHANE	FLUORO TRICHLOR METHANE	DICHLORO DIFLUORO METHANE	CHLORO DIBROMO METHANE
LOCATION 1	5	P	S	J4601	840417	1215		204 M							
LOCATION 1A	0	M	S	J4638	840418	1240		3.5 M							
LOCATION 2	5	P	S	J4613	840418	0930		32.4 M							
LOCATION 3	5	P	S	J4602	840417	1233		2646 M							
LOCATION 4	04	P	S	J4614	840418	0942		23.3							
LOCATION 5	5	P	S	J4603	840417	1254		692							
LOCATION 7	0	P	S	J4620	840417	1015		69.8							
LOCATION 8	5	P	S	J4615	840418	0953		25.5 M							
LOCATION 9	2	P	S	J4605	840417	1312		189 M							
LOCATION 10	35	P	S	J4606	840417	1327		60 M							
LOCATION 11	0	S	S	J4621	840417	1045									
LOCATION 12	40	P	S	J4607	840417	1336		437 M							
LOCATION 13	0	S	S	J4622	840417	1145									
LOCATION 14	3	P	S	J4616	840418	1001	361 M	96 M							
LOCATION 15	12	P	S	J4612	840417	1607		112 M							
LOCATION 16	35	P	S	J4611	840417	1558		91 M							
LOCATION 17	54	P	S	J4610	840417	1532		113 M							
LOCATION 18	50	P	S	J4609	840417	1520		52 M							
LOCATION 19	45	P	S	J4608	840417	1505		112 M							
LOCATION 20	3	P	S	J4617	840418	1011	7.2 M	11.3 M							
LOCATION 21	35	P	S	J4618	840418	1029	2.5 M	6.5 M							
LOCATION 22	38	P	S	J4619	840418	1040		36.7 M							
LOCATION 23	45	S	S	J4630	840418	1230									
LOCATION 24	33	M	S	J4631	840418	1247		3 M							
LOCATION 25	25	S	S	J4623	840417	1210									
LOCATION 26	35	S	S	J4627	840418	1051		12.6 M							
LOCATION 27	30	S	S	J4628	840418	1107		13 M							
LOCATION 28	34	S	S	J4629	840418	1116		11.6 M							
LOCATION 32	0	S	S	J4624	840417	1415		6.3 M							
LOCATION 34	0	S	S	J4625	840417	1240									
LOCATION 36	40	I	S	J4641	840419	1014		251							
LOCATION 37	10	M	S	J4640	840419	1008		5 M					5 M		
LOCATION 38	24	I	S	J4643	840419	1043		176							
LOCATION 39	40	I	S	J4642	840419	1026		300							
LOCATION 40	4	I	S	J4644	840419	1052		179							
LOCATION 41	0	S	S	J4626	840417	1320		6.3 M							
LOCATION 42	10	I	S	J4645	840419	1102		77							
LOCATION 43	33	I	S	J4646	840419	1109		174							
LOCATION 44	29	I	S	J4649	840419	1221		246							
LOCATION 45	6	I	S	J4648	840419	1214		105							
LOCATION 46	4	I	S	J4647	840419	1210		210							
LOCATION 48	35	M	S	J4636	840418	1417		9 M					5.0		
LOCATION 51	45	I	S	J4650	840419	1252		360							

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ORGANIC ANALYSES
851107
                                                                 VALUE CODES:                          UNITS: UG/KG (PPB) DRY WEIGHT
                                                                    U - NOT DETECTED, VALUE SHOWN IS MINIMUM QUANTIIFIABLE LIMIT
                  EAGLE HARBOR SURVEY                               M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
             4/17-18/84   SEDIMENTS / TISSUE                        K - MULTIPLY VALUE SHOWN BY 1,000
                5/07/84      SEDIMENTS                           ANALYSIS CODES: (INDICATE LAB PERFORMING ANBALYSIS)
                                                                    P-PEDCO, S-S CUBED, M-MEAD COMPU CHEM, W-WEST COAST TECHNICAL
                                                                 DEPTH IS IN FEET

                                                      ------------------------------ V O L A T I L E S ------------------------------
                                                      TETRA
                           DEP ANALY   OTR            CHLORO            TRICHLOR VINYL
STATION DESCRIPTION         TH  SIS  M NUM    DATE   TIME ETHENE   TOLUENE  ETHENE   CHLORIDE
------------------------- --- ----- - ------ ------ ---- -------- -------- -------- --------
LOCATION 28                 34    S   S J4629  840418 1116         !  11.6 M!        !        !
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ANALYSES
851107
                                                   NON PRIORITY POLLUTANTS
                                                      U - NOT DETECTED, VALUE SHOWN IS MINIMUM QUANTIIFIABLE LIMIT
               EAGLE HARBOR SURVEY                    M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
        4/17-18/84   SEDIMENTS / TISSUE               K - MULTIPLY VALUE SHOWN BY 1,000
           5/07/84       SEDIMENTS                 ANALYSIS CODES: (INDICATE LAB PERFORMING ANBALYSIS)
                                                      P-PEDCO, S-S CUBED, M-MEAD COMPU CHEM, W-WEST COAST TECHNICAL
                                                   DEPTH IS IN FEET

                                                                          CARBON            4-METHYL
                         DEP ANALY                                 2-BUTA   DISUL-   2-HEX    2-PENTAN          VINYL
STATION DESCRIPTION       TH  SIS  M NUM    DATE   TIME ACETONE  NONE     FIDE     ANONE    ONE      STYRENE  ACETATE  O-XYLENE
------------------------ --- ----- - ------ ------ ---- -------- -------- -------- -------- -------- -------- -------- -------- --------
LOCATION 1                 5   P   S J4601  840417 1215 143    M!        !        !        !        !        !        !        !        !
LOCATION 2                 5   P   S J4613  840418 0930 31. 9 M-!        !        !        !        !        !        !        !--------!
LOCATION 3                 5   P   S J4602  840417 1233 2583   M!        !        !        !        !        !        !        !        !
LOCATION 4                04   P   S J4614  840418 0942 18. 6 M-!        !        !        !        !        !        !        !--------!
LOCATION 5                 5   P   S J4603  840417 1254 638     !        !        !        !        !        !        !        !--------!
LOCATION 6                60   P   S J4604  840417 1303 454    M!        !        !        !        !        !        !        !--------!
LOCATION 7                 0   P.  S J4620  840417 1015 1319   -!8.6  K--!        !13.3K---!        !        !        !        !--------!
LOCATION 8                 5   P   S J4615  840418 0953 56  M---!        !        !        !        !        !        !        !--------!
LOCATION 9                 2   P   S J4605  840417 1312 87. 4  M!        !        !        !        !        !        !        !--------!
LOCATION 10               35   P   S J4606  840417 1327 83. 3  M!        !        !        !        !        !        !        !--------!
LOCATION 11                0   S   S J4621  840417 1045         !        !1   M---!        !        !        !        !        !--------!
LOCATION 12               40   P   S J4607  840417 1336 52   M--!        !        !        !        !        !        !        !--------!
LOCATION 13                0   S   S J4622  840417 1145 13. 2 M-!        !        !        !        !        !        !        !--------!
LOCATION 14                3   P   S J4616  840418 1001 141  M--!        !        !        !        !49.5M---!        !514-----!--------!
LOCATION 15               12   P   S J4612  840417 1607 68  M---!        !        !        !4. 6M---!        !        !        !--------!
LOCATION 16               35   P   S J4611  840417 1558 91. 7 M-!        !        !        !10  M---!        !        !        ! -------!
LOCATION 17               54   P   S J4610  840417 1532 96  M---!        !        !        !        !        !        !        ! -------!
LOCATION 18               50   P   S J4609  840417 1520 24  M---!        !        !        !        !        !        !        !--------!
LOCATION 19               45   P   S J4608  840417 1505         !        !        !        !        !        !        !        !--------!
LOCATION 20                3   P   S J4617  840418 1011 101. 5 M!        !        !        !        !        !        !9.7M----!------ -!
LOCATION 21               35   P   S J4618  840418 1029 127  M--!5.6  M--!        !        !        !6.1M----!        !        !--------!
LOCATION 22               38   P   S J4619  840418 1040         !3.6  M--!17  M---!        !        !6M------!        !        !--------!
LOCATION 23               45   S   S J4630  840418 1230         !        !1. 76M--!        !        !        !        !        !--------!
LOCATION 25               25   S   S J4623  840417 1210         !        !        !        !        !        !        !        !--------!
LOCATION 26               35   S   S J4627  840418 1051 78. 4  C!        !2. 5  M-!        !        !        !        !        !--------!
LOCATION 27               30   S   S J4628  840418 1107 59. 9M--!        !        !        !        !        !        !        !--------!
LOCATION 28               34   S   S J4629  840418 1116 79. 5C--!        !1. 55M--!        !        !        !        !        !--------!
LOCATION 32                0   S   S J4624  840417 1415 22  M---!        !        !        !        !        !        !        !--------!
LOCATION 34                0   S   S J4625  840417 1240         !        !        !        !        !        !        !        !--------!
LOCATION 36               40   I   S J4641  840419 1014 140    M!        !        !        !        !        !        !        !        !
LOCATION 38               24   I   S J4643  840419 1043 95     M!        !        !        !        !        !        !        !        !
LOCATION 39               40   I   S J4642  840419 1026 488     !        !        !        !        !        !        !        !        !
LOCATION 41                0   S   S J4626  840417 1320 826    C!        !1. 3 M--!        !        !        !        !        !--------!
LOCATION 42               10   I   S J4645  840419 1102 217    M!        !        !        !        !        !        !        !        !
LOCATION 43               33   I   S J4646  840419 1109 383    M!        !        !        !        !        !        !        !        !
LOCATION 44               29   I   S J4649  840419 1221 460    M!        !        !        !        !        !        !        !        !
LOCATION 45                6   I   S J4648  840419 1214 112    M!        !        !        !        !        !        !        !        !
LOCATION 51               45   I   S J4650  840419 1252 327    M!        !        !        !        !        !        !        !        !
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ANALYSES
851107

EAGLE HARBOR SURVEY
4/17-18/84 SEDIMENTS / TISSUE
5/07/84 SEDIMENTS

NON PRIORITY POLLUTANTS
U - NOT DETECTED, VALUE SHOWN IS MINIMUM QUANTIIFIABLE LIMIT
M - BELOW QUANTIFIABLE LIMIT, VALUE SHOWN MAY BE IN ERROR
K - MULTIPLY VALUE SHOWN BY 1,000
ANALYSIS CODES: (INDICATE LAB PERFORMING ANBALYSIS)
P-PEDCO, S-S CUBED, M-MEAD COMPU CHEM, W-WEST COAST TECHNICAL
DEPTH IS IN FEET

STATION DESCRIPTION	DEP TH	ANALY .SIS	M	NUM	DATE	TIME	BENZOIC ACID	2-METHYL PHENOL	4-METHYL PHENOL	2,4,5 TRI CHLORO PHENOL	ANILINE	BENZYL ALCOHOL	4-CHLORO ANILINE	DIBENZO FURAN	2-METHYL NAPHTH-ALENE
LOCATION 11	0	S	S	J4621	840417	1045	2545 M-		127 M--						
LOCATION 13	0	S	S	J4622	840417	1145								359M----	
LOCATION 14	3	P	S	J4616	840418	1001								13955---	35773---
LOCATION 20	3	P	S	J4617	840418	1011									1026----
LOCATION 21	35	P	S	J4618	840418	1029								137.8M--	
LOCATION 23	45	S	S	J4630	840418	1230	3500M--		175 M---					575M----	700M----
LOCATION 27	30	S	S	J4628	840418	1107	7567M--							756M----	1513M---
LOCATION 28	34	S	S	J4629	840418	1116				80275---				64000---	16055M--
LOCATION 30	40	M	S	J4633	840418	1320								860 M	
LOCATION 34	0	S	S	J4625	840417	1240	3221 M-							322M----	
LOCATION 41	0	S	S	J4626	840417	1320	2304 M		160 M--					230M----	

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